NATUR CYMRU

The Nature of Wales

Number/Rhif 22 • Spring/Gwanwyn 2007

In this edition:

- Beavers
- Connecting nature
- On Cader Idris
- Ring ouzels
- Bardsey birds
- Huganod

NATUR CYMRU
The Nature of Wales

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Tanysgrifiadau/Subscriptions:
£12.50 y flwyddyn/per year

A fyddech gystal ag anfon sieciau yn daladwy i:
Please send cheques payable to **Natur Cymru** to:

Natur Cymru
Maes y Ffynnon
Penrhos Garnedd
Bangor
Gwynedd
Wales
LL57 2DW

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Natur Cymru is published four times per year, in March, June, September and December. Articles are published in the language in which they are submitted. They are followed by summaries in the other language, and some regular columns appear in both languages. If you would like to receive a translation of any article, please contact the Editor.

Natur Cymru is intended to promote the exchange of information about biodiversity and encourage debate. If you have information, ideas for articles or artwork which you think might be of interest to readers, please contact the Editor.

Mae *Natur Cymru* wedi'i argraffu ar bapur di-glorin a ddaw o goedwigoedd cynaliadwy sy'n cael eu rheoli.
Natur Cymru is printed on chlorine-free paper sourced from managed and sustainable forests.

Clawr blaen / Front cover:
Gower Cliffs
Jane Matthews

ISSN 1742-3740

Argraffwyd gan/Printed by: LS Printworks, Amlwch • Dylunio gan/Design by: Mel Parry Design, melparry1@tiscali.co.uk

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NATUR CYMRU GOLYGYDDOL

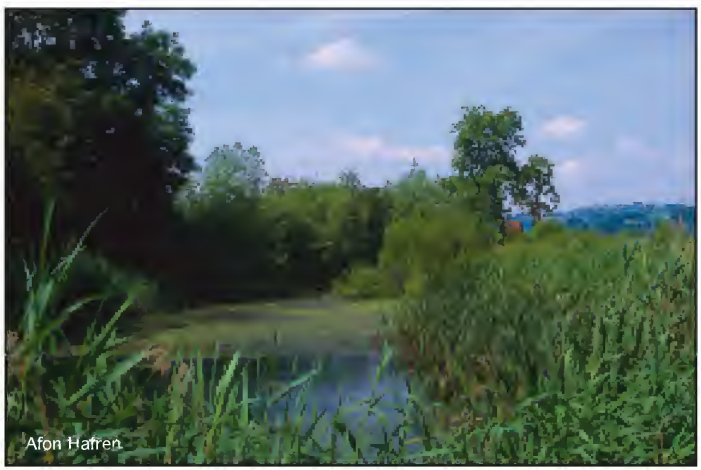
Yng Nghymru, dydych chi byth ymhell o fyd natur. Os yw dod i gysylltiad â natur yn gwneud i'ch calon guro rhywfaint yn gyflymach, wel dyma'r lle i chi.

Mae'r gaeaf a'r gwanwyn yn dymhorau cyffrous iawn i wylwyr adar, ac mae adar yn cael lle amlwg yn y rhifyn hwn. I'r bobl hynny sy'n gweithio'n wirfoddol mewn gwarchodfa ar lannau Afon Hafren, lle ceir llond lle o adar, mae yna nifer fawr o nythod i'w monitro – nythod telorion y cyrs, gwenoliaid a gwenoliaid y bondo, ynghyd ag amryw adar eraill. Llafur cariad yw hyn, ys dywed Brayton Holt. Rhaid i unrhyw un sy'n honni ei fod yn adaregydd ddarllen erthygl Mick Green sy'n sôn am hynt mwyalchen hudolus o'r enw mwyalchen y mynydd. Fel y gŵyr pawb, mae Ynys Enlli yn lle gwych i adar - efallai'n wir y bydd disgrifiad Steve Stansfield o adar cyfareddol yr ynys drwy'r tymhorau yn eich sbarduno i drefnu ymweliad yn syth.

Mae David Mitchell yn cymharu adar a mamaliaid ei ardal enedigol yn Angus efo adar a mamaliaid ei gartref presennol yng Nghaerdydd, ac mae'r erthygl yn ein hatgoffa bod daearyddiaeth a hinsawdd yn cael cryn effaith ar fywyd gwyllt.

Dydy'r cofnodion hanesyddol ac archeolegol a gaiff eu cynnwys mewn caeau di-rif ac mewn terfynau eraill ddim yn hawdd eu darllen. Ond mae Richard Kelly yn datgelu'r cyfrinachau cyfoethog sy'n llechu o fewn y dirwedd. Cnoi cil ar fynydd mawr a wna Paul Evans. Mae Cadair Idris yn fod ynddo'i hun, a gall rhoi taw'n syth ar fân siarad. Mae ei ddifaterwch tuag at amserlenni bodau dynol yn atseinio trwy'i glogwyni ef a'n hymennydd ni. Deffro rhyw awydd ynom i fyfyrio a wna llefydd o'r fath, gan roi'r gallu inni weld pethau yn eu gwir oleuni.

Mae Jim Latham yn cyflwyno'r cysyniad o gael 'cysylltedd ecolegol'. Wrth i gynefinoedd bywyd gwyllt gael eu darnio a'u hynysu, ni all y rhywogaethau symud i ardaloedd newydd, ac yn ei erthygl mae'n sôn am a sut y gellir rhwystro hyn rhag digwydd. Y syniad sydd wrth wraidd hyn yw y dylid gweithredu ar raddfa eang gan geisio dod o hyd i rwydweithiau y gellir eu defnyddio i gysylltu cynefinoedd gyda'i gilydd. Wrth gwrs, mae trafod hyn yn hawdd – gwaith anos o lawer yw cael gafael ar yr adnoddau i droi gair yn weithred. Rhaid inni geisio perswadio'r rheini a chanddynt arian a phŵer y gall cael amgylchedd naturiol sy'n gweithio fel y dylai gynnig bywyd gwell i bob un ohonom.



Brayton Holt

Afon Hafren

Rhaid i hyn oll gael ei arddangos yn ymarferol. A fydd afancod yn dychwelyd i afonydd Cymru? Mae Ziggy Otto yn rhestru sawl rheswm o blaid hyn. Fe allai ailgyflwyno'r creadur hwn yn llwyddiannus – gan ystyried natur fel cyfaill yn hytrach na gelyn – fod o fudd i dwristiaeth, gan ddod â buddion eraill yn ei sgil. Gyda'r etholiadau ar y gorwel, rwyf eisiau pleidleisio dros blaid a chanddi'r weledigaeth i roi mwy o le i natur. Ac fe wn i nad myfi yw'r unig un.

James Robertson

NATUR CYMRU EDITORIAL

You are never any distance from wildlife in Wales; if close contact with nature makes your pulse beat a little faster, then this is a great place to be.

Winter and spring are exciting seasons for the birdwatcher, and birds feature prominently in this issue. For volunteers on a bird-rich reserve on the river Severn there are numerous nests to monitor, of reed-bed warblers, swallows and martins and the many other breeding birds. It is a labour of love, as Brayton Holt makes clear. Mick Green's account of the predicament of the charming blackbird of the mountains, the ring ouzel, is essential reading for any ornithologist. Bardsey is a well known ornithological hotspot, and Steve Stansfield's account of the changing birdlife on the island through the seasons may tempt you to book your visit now.

David Mitchell contrasts the birds and mammals of his native Angus with those of his adopted home in Cardiff. It is a good reminder of the influence of geography and climate on wildlife, which changes from place to place.

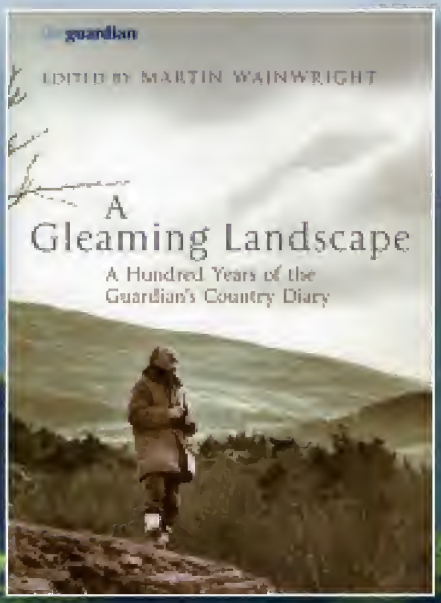
The historical and archaeological records which the profusion of field and other boundaries contain are not easy to read. Richard Kelly uncovers a rich layer of interest hidden in the landscape. Paul Evans entertains thoughts on a big mountain. Cader Idris has its own being, which can quickly still small-time chatter. Its indifference to human timescales reverberates through its crags and our brains. Places like this stir reflection and give perspective.

Simon Pickering/Cotswold Water Park Society

Jim Latham introduces the concept of ecological connectivity, and how to counter the problem that, as wildlife habitats become fragmented islands, species become landlocked in them, unable to spread to new areas. The idea is to think at the landscape scale and identify networks which would connect habitats together. Of course, thinking is less than half the battle. Getting hold of the means, including resources, to make the thought a reality is much harder. We will have to convert those with the money and power to the idea that a connected, properly functional natural environment offers a better life for people.

This needs to be demonstrated in practical ways. Will beavers return to a Welsh river? Ziggy Otto offers plenty of reasons why they should be here. A successful reintroduction, recognising nature as ally rather than enemy, would help tourism and bring other benefits in its wake. With elections coming soon, I will want to vote for a party which has the vision to give more space to nature. I know I won't be alone.

James Robertson



Jeremy Moore/CCW

Cader Idris

A Gleaming Landscape

The Guardian Country Diary has become something of an institution, and an important outlet for writers about Welsh nature like Bill Condry and Jim Perrin. A collection of diarists ascended Cader Idris to launch a book celebrating a century of this institution. One of these diarists, ***PAUL EVANS,*** *describes the scene, and the thoughts of nature, and language, which the experience stirred.*

Fog on the mountain changes everything. Fog steals your sight, your grasp of distances, your trust in mortality. Through a process of reverse osmosis, the fog draws out your shadow and sets it free – a wraith to wander the mountain.

From the start of the Pony Track on the Dolgellau side of Cader Idris, the cloud cover on top created an atmosphere of suppressed anxiety among those preparing to walk up. But a stiff breeze raked across the mountain, scratching away the cloud and flinging fields of autumn sunlight across its flanks. With friends, and others met for the first time, the gradual ascent was a procession of conversations punctuated by pauses to catch breath and look at the view. This chatting and looking was a kind of diversion from the enormity of the landscape, an easing of suddenly exposed sensibilities into an environment with such raw, overwhelming power.

Cader Idris is a particular mountain for many reasons. Unlike many of the mountains in north Wales, it is not surrounded by others but open to the sea and the west between two of the most beautiful tidal estuaries in Britain, the Mawddach and Dyfi. Like Snowdon, which is 90 metres taller, Cader has towering crags above a mysterious pool which gives it that sublime beauty visitors have sought for centuries. But unlike Snowdon it has no railway, no summit café, no compromise – other than a small shelter on top – to its wildness, and so a kind of snobbery singles it out as the more authentic mountain of the two. Legend has it that if you spend the night on Cader Idris you come down either an inspired poet or a raving lunatic, although it is unclear how you tell the difference between these two privileges.

Apart from the picking-up on previous conversations and the getting-to-know-you conversations, we were talking ourselves into this place. As is the way of outsiders, our talking was really about finding similarities and banding together, because the noise we made here had no relevance, no traction on the language of the landscape itself – unlike the lone raven flying overhead, whose charismatic 'kronk' had an ancient purchase on a wild poetry of the place. And the connection between language and landscape was the reason we were there. We were walking up the mountain to launch a book called *A Gleaming Landscape - A Hundred Years of the Guardian's Country Diary*. In its uniquely idiosyncratic way, this too was a conversation about the relationships between people, places and wildlife, and written within the language of the natural history tradition.

At the tail end of the 19th century, Friedrich Nietzsche suggested that natural history – which he saw as a war against fear and superstition – ought to be narrated, "in such a way that everyone who hears it is irresistibly inspired to strive after spiritual and bodily health and vigour..." and he grumbled that artists had yet to discover the right language to do this. "Nonetheless," Nietzsche admitted, "the English have taken admirable steps in the direction of that ideal... the reason is that they [natural history books] are written by their most distinguished scholars – whole, complete and fulfilling natures..."

The English language tradition of nature writing and narrating natural history is gloriously rich and although it may not make any bold claims to improving health and well being, it does a good job, for readers and the subjects of the writing. And where the insights of field naturalists met the legacy of poets like Clare, Wordsworth, Hughes and Heaney, there emerged a language as vivid as any cultural achievement. That this language was still alive and kicking and read every day in a newspaper was astounding. So to hold a century's worth of country diaries was, for an interloper like me, both an inspiring and humbling experience. But on the slopes of Cader Idris, a mountain of resplendent Welshness, the English we were speaking and reading from the book seemed a colonial imposition, and a thin, inadequate stuttering at that.

The way the poet RS Thomas pronounced 'mynydd' sent a shudder down my spine when I asked him, a few years ago, if the meanings for Welsh and English names for the same thing were different. The resonance and cultural geography of 'mynydd' could accommodate a Cader Idris, whereas 'mountain' swept it into an anonymous range where its name and identity faded into obscurity. Here we were, on this most

The diarists atop Cader Idris

poetic mynydd, looking at the view through trailing rags of cloud, taking photographs, even metaphorical ones, enframing the visible world within an aesthetic: capturing it, rationalising it, acquiring it. This viewing was a way of perceiving the world in manageable chunks and we were identifying signals in the landscape, the signs of mortality which link to our own.

A mind full of story
NOVEMBER 2005

Alone, I pace the springy turf of a green path leading up from Llyn Tecwyn Isaf into the northern Rhinogydd. These are the most wild and strange hills in the whole mountainous land of Wales.

Jim Perrin

The mountain path, the stone walls, fields, woods, quarries, farms, settlements – these things bore witness to countless generations of people who laboured in the hills, valleys, estuaries and sea. This was a landscape of life stories and works which defined mortality. Mortality, according to philosophers like Hannah Arendt, is the hallmark of human existence, because we do not exist only as members of a species but have individual lives rising from our biological life, distinguished from all other things by our works, deeds and words. And here they were in the landscape, seen from the mountain, a mortality we could tell stories about. These stories of labour and work are not the same as the stories of running streams, rocks and the club mosses growing between them, the raven in flight, the stonecrop on the summit and the mountain itself. These 'natural' histories – often valued because they are things which can be trusted to represent the persistence of the Earth beyond our own mortality – are drawn into our world by language. But is this the best way of representing Nature or a cultural default? Will the next century of writers want to shake loose from this tradition; what happens next?

Over the years, nature writers and country diarists developed an increasingly sophisticated ecological literacy of the world around them through the naming of things and an understanding of the relationships between them. They found ways of linking simple observations to bigger issues by remaining in the present, the particular. For writers of my generation, a nostalgia for lost wildlife and habitats and the business of bearing witness to a war of attrition in the countryside colours what we're about. The anxieties of future generations may not be the same.

Articulating the 'wild' as a qualitative character of Nature and context for the more quantitative notion of biodiversity, will, I believe, become a dynamic cultural project. The re-wilding of lands and seas, coupled with a re-wilding of experience and language, offers fertile ground for writers. A response to the anxieties springing from climate change and a general fear of Nature answering our continued environmental injustices with violence will need a reassessment of our feelings for the Nature we like – cultural landscapes, continuity, native species – as well as the Nature we don't like – rising seas, droughts, 'invasive' species. Whether future writers take their sensibilities for a walk and, like a pack of wayward dogs unleashed, let them loose in hills and woods to sniff out some fugitive truth hiding in the undergrowth, or choose to honestly recount the this-is-where-I-am, this-is-what-I-see approach, they will be hitched to the values implicit in the language they use. They should challenge these. Perhaps they will see our natural history as a contributor to the commodification of Nature and the obsessive managerialism of our times. Perhaps they will see our romanticism as a blanket thrown over the traumatised victim of the countryside. But maybe they will follow threads we found in the writings of others and find their own way to wonder.

Clouds returned to Cader Idris. We imagined the ghosts of country diarists, nature writers, naturalists, conservationists, inspired poets and raving lunatics, emerging from the fog, laughing at our daftness, joining in. The mountain of course had its own being, irrespective of our works and words – a vast indifference of inspiring magnitude, and a fog inhabited by wandering wraiths.

***Dr Paul Evans** is a Guardian Country Diarist.*

Murder most royal
JULY 2003

From trees above, a wood pigeon offered its soft bluesy five-note call, again and again and again…I had hoped for something more bardic, the complex and ominous song of the wren perhaps. But no, only this apparently dull pigeon voice had anything to say in the hot summer air.

Paul Evans

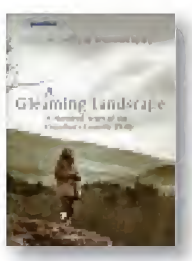
A GLEAMING LANDSCAPE – A HUNDRED YEARS OF THE GUARDIAN COUNTRY DIARY
Martin Wainwright (Ed)
Aurum 2006
Hardback £12.99

I am all for recycling, but re-heated collections of pieces of journalism do not necessarily make proper books. There can be something disembodied about them: the entries lack the context provided by a newspaper column on a particular day. I did not enjoy, or finish, a recent book of nature notes from *The Times*.

By contrast, at the hands of a skilful editor, a hundred years of Guardian Country Diaries have been turned into a gem of a book. This is precisely because a context has been provided for each chapter. Each of the ten chapters covers a decade or so of entries, and is prefaced with an engaging scene-setting introduction. The small, unimportant details of natural history are played out against what we take to be the great events of human history. The effect is to subvert our assumptions about what is really important. An old lady who lived to 102 had three hobbies – chrysanthemums, bees and patchwork quilts. This little observation, made in June 1944, tells of the sustaining power of the human spirit and of nature. There is much like this in these pages.

There is also a poignant record of the changing fortunes of nature, and of the dawning awareness of our responsibility for these changes. The very individual character of the collection of mostly amateur naturalists is brought to life, and adds to our appreciation of their diary entries. These entries are much more than comfortable wallpaper for the mainly urban readership. They describe widely shared passions, occasional outrage, moments of recognition, and hunt out the words to communicate the thoughts and feelings stirred by contact with nature. We care because the diarists care.

The illustrations by Clifford Harper which start each chapter are a delight and, with photographs, complete the metamorphosis of this collection of writings into a proper book, a bright, sparkling celebration of a century of taking nature seriously.



James Robertson

Gwerthoedd mewn Geiriau

Ar lethrau Cader Idris y lansiwyd llyfr, yn ddiweddar, i ddathlu canrif o ysgrifau byrion y 'Country Diary' ym mhapur newyddion 'The Guardian'. Rhyfedd oedd dewis mynydd mor hanfodol Gymreig â hwn i ddathlu parhad y traddodiad Seisnig cyfoethog o ysgrifennu am fyd natur.

Drwy iaith y mynegir gwerthoedd. Mae llechweddau'r Gader yn frith o olion sydd â straeon dynol yn gysylltiedig â nhw. Straeon gwahanol sydd gan y nentydd, y mwsogl a'r creigiau ond iaith sy'n eu tynnu mewn i'n byd ni. Rydym yn eu gwerthfawrogi am eu bod yn cynrychioli grym y Ddaear a pharhad sydd y tu hwnt i oes dyn. Ar y cyfan, croniclo diflaniad bywyd gwyllt a chynefinoedd y mae'r genhedlaeth bresennol o ysgrifennwyr byd natur Seisnig wedi'i wneud. Rhamantwyr efallai, neu dystion i awydd dyn i or-reoli a gweld natur ond yn nhermau defnyddioldeb i ddyn.

Ond yn y dyfodol, bydd rhaid i ysgrifennwyr herio'u gwerthoedd a phwyso a mesur yr hyn rydym yn hoff o gysylltu gyda byd natur – tirweddau diwylliannol, parhad, rhywogaethau brodorol - gyda'r hyn sy'n llai dymunol, fel moroedd yn codi, sychder a rhywogaethau ymledol. Mae'r syniad o droi cynefinoedd yn fwy gwyllt eu natur, gyda'r ieithwedd a'r profiadau sydd ynghlwm wrth hynny, yn cynnig tir ffrwythlon i ysgrifennwyr y dyfodol.

Chris Hall

Reintroducing ‘yr Afanc’

Beavers have been creatures of fables, shadows of a dimly remembered past for many centuries. Once they supported a thriving industry. As the quality of their river habitat improves, could they make a comeback, restoring biodiversity and helping stimulate rural regeneration and tourism? ZIGGY OTTO explores the history of the beaver in this country, its ecology and its future.

The Afon Teifi is nowadays arguably one of the best otter rivers in Britain again. The increasing number of otters is evidence of environmental improvements, in particular of water quality, as a result of the reduction in sheep dip entering watercourses and the phasing out of PCBs and dioxins.

Once upon a time, the Teifi was also known for the abundance of another water-loving, furry creature – the European beaver *Castor fiber*. It was not the only river to support beavers in Wales. The Afon Ogwen, where it rushes through the Nant Francon at the northern reach of Snowdonia before spilling into the sea, is thought to have been the last refuge of the beaver. There is also evidence of a population on the Afon Conwy, where there is a beaver pool – Pwll Yfanc.

The beaver was locally so abundant up to the Middle Ages that it even supported a beaver hat industry, based in Carmarthen and at Tregaron. The Welsh cleric Gerald de Barri, writing under the name ‘Giraldus Cambrensis’ in his *Itinerary through Wales*, provides the best early

reference to the existence of *yr Afanc*, the beaver, in the British Isles. In 1188 he wrote: *"The Teifi is the only river in Wales, or even in England, which has beavers; in Scotland they are said to be found in one river, but are very scarce..."*. Furthermore, Hywel Dda, Howel the Good, who governed much of Wales in the 10th Century, describes the beaver in his Laws as a scarce but extremely valuable commodity. A beaver was then valued at 'six score pence' – between £5,000 and £10,000 in today's terms. Because of the value of its fur, especially in felt manufacture, the delicacy of its flesh and the supposed usefulness of its scent gland in folk medicine, the beaver was persecuted and hunted from prehistoric times to eventual extinction in England and Wales in the 12th Century, but survived until the 1600s in remote parts of Scotland.

The beaver narrowly escaped the same fate on the continent, as laws adopted in the 1800s saved beavers from complete extinction. Just like the red kite in Wales, the beaver has since staged a comeback right across Europe. As a result of strict hunting controls, followed by natural re-colonisation, and with the support of over 100 successful reintroduction schemes, the beaver is now home again in over 20 European countries. Regrettably, the UK is not one of them yet, although a few have been released onto large enclosed private estates, most recently at the Cotswold Water Park in October 2005.

England, Wales and Scotland are among just a handful of European countries that have failed thus far to restore the European beaver across its former range, although Article 22 of Directive 92/43/EEC *Conservation of Natural Habitats and of Wild Flora and Fauna* (the Habitats Directive) requires member states to investigate "the feasibility and desirability" of reintroducing formerly native species listed in Annex IV of the Directive, including European beaver. Article 22 states that this should take place "only after proper consultation of the public concerned".

In 2002, Scottish Natural Heritage (SNH) applied to the Scottish Executive (SE) to allow for a trial reintroduction, involving the release of about twenty tagged Norwegian beavers to the Knapdale area of Argyllshire, in western Scotland, and to monitor their progress there for five years. The application was supported by data from other European reintroduction schemes and an extensive public consultation, which was predominantly in favour of reintroduction. Everyone expected the Government to approve the trial, but the SE decided not to. The reasons given were that part of the trial area was within a Special Area of Conservation (designated under the Habitats Directive), and that there might be possible significant adverse effects on features of the site. Furthermore, there was a possibility that the exit strategy was to involve the killing of the beavers, which are protected under European law, thus raising doubts over the legality of the exit strategy.

Simon Pickering/Cotswold Water Park Society

Beaver dam on small stream

Simon Pickering/Cotswold Water Park Society

In Wales, it is possible that any beaver reintroduction proposal could also meet with some resistance, as landowners and managers would have concerns about potential impacts on them. Discussions are at an early stage, and need to take these concerns fully into account. But should landowners be worried? To answer this question we need to delve a little into the ecology of the European beaver, what it does and doesn't do, and how any reintroduced population could be managed.

Beavers are semi-aquatic. They prefer streams and small lakes with nearby growth of alder, aspen, birch, hazel, poplar or willow. Coniferous woods can be utilized, but European beavers do not like conifers in general and tend to leave them alone if broadleaved trees are present. Beavers are herbivores; they eat mostly grasses and herbs in summer, but switch to the bark and twigs of trees in autumn and winter. There have been cases of beavers feeding on root crops and maize, and damaging orchards, but these are rare and easily and cheaply prevented. On the continent, conflicts between beavers and human interests are uncommon, and usually easily resolved. Considering that beavers generally do not like to venture more than about 20 metres from the waterside, it takes very little resources to make trees and crops safe; vulnerable trees can be protected with wire mesh and sand paint, and crops can be electrically fenced. In fact studies have shown that beavers have good memories, and an encounter with an electric fence will keep a beaver away for up to three months.

There is evidence that tree clearance in the immediate vicinity of tributary streams can counter the effects of acid rain and benefit juvenile fish life by preventing shading out under the canopy. If the beaver population is too dense, their dam-building activities may cause damage by flooding meadows and pastures, although these problems can be addressed by appropriate management and contingency plans, including a financial compensatory scheme available to farmers and landowners.

Beavers are important riparian 'engineers'; they restore river habitats by way of the natural system and free of charge, whereas the Environment Agency, for instance, has to deploy costly and labour intensive methods to restore habitats in order to make rivers and streams more attractive to migratory fish such as salmon and sea trout. How do they do it? Beavers are well known for their dam-building enthusiasm, although the European beaver *Castor fiber* does not do so as fervently as its North American cousin *Castor canadensis*. Dams are constructed on small streams in order to raise and stabilise the water level so that the entrance to their lodge or burrow is underwater. However, beavers only begin to build dams once favourable habitat becomes scarce due to population growth. In a reintroduction scenario, dams would probably not be seen until 30 years after the reintroduction.

Dam-building slows the pace of run-off, thereby reducing bank erosion and downstream sedimentation. In raising the water table, they also create habitats for insects, fish, amphibians and fowl. Their activity in clearing some aquatic plants and in enriching sediments with nutrients favours macrobiotic life, thus assisting wildlife throughout the ecosystem and the food web. Newly built beaver dams trap sediment, thereby reducing the effects of fluctuating water levels. This in turn helps to encourage the development of willow and other riparian plants. Given time, beavers will create wetlands. An expanded riparian zone stabilises the riverbanks and improves riparian aquatic habitats, to which wildlife responds very quickly. Reintroduction studies have shown that the number of avian species increased, and brown trout moved into areas where

Simon Pickering/Cotswold Water Park Society

Immpressive tree-felling abilities of the beaver

they had not been before.

Beavers do not pose any direct threat to people or livestock. Any imported beavers would undergo rigorous health checks and an extended quarantine before release so diseases such as rabies would not be a problem. Other wildlife, such as otters, is also safe, as studies have shown that when the beaver was reintroduced, otters and herons soon followed. There can be but little doubt that beavers act as a keystone species in the aquatic environment and provide many benefits for biodiversity. There is a general increase in habitat heterogeneity, spatially and temporally, giving rise to increased biodiversity and aquatic biomass.

In light of the Scottish experience, are the problems potentially associated with reintroducing the European beaver to Wales insurmountable? The author considers they are not, in particular if there is a true commitment by the Welsh Assembly Government and its advisors to achieve and maintain the highest level of biodiversity possible in Wales. Under the real spectre of climate change and its certain detrimental impacts on aquatic biodiversity, this will also necessitate the reintroduction of formerly native aquatic species. It is hoped that after 25 years of UK debate, we are now moving gradually closer to reintroducing the European beaver to the British Isles - some 400 years after bringing about its extinction.

***Dr Ziggy Otto** is Lecturer in the Coastal Zone & Marine Environment Research Unit, Pembrokeshire College, University of Glamorgan.*

Amser i groesawu'r afanc nôl i Gymru?

Mae'r afanc wedi cael help i ail-gytrefu ei hen ardaloedd ar hyd a lled Ewrop - ond nid yn Lloegr, Cymru a'r Alban. Fe fethodd un cais diweddar i ailgyflwyno'r creadur i'r Alban oherwydd pryderon ynglŷn â'r effaith ar fywyd gwyllt arall, ac oherwydd anniddigrwydd ynglŷn â'r dull o wared yr afancod, pe byddai'r arbrawf yn aflwyddiannus.

Mae trafodaethau cynnar ar y gweill ynglŷn ag ailgyflwyno'r afanc i afonydd Cymru. A ddylai deiliaid tir fod yn bryderus? Mae'r profiad yn Ewrop yn dangos i ni nad yw afancod yn crwydro'n bell o'r dyfrffyrdd ac nad ydynt felly'n debygol o beri difrod i gnydau ar dir cyfagos. Rhaid derbyn y gall eu hargaeau beri rhywfaint o orlifo ond mae'r argaeau hyn hefyd yn arafu llif y dŵr oddi ar dir cyfagos, yn atal erydiad y glannau ac yn atal gwaddodion rhag cael eu sgubo ffwrdd gan y llif. Drwy godi a sefydlogi lefel y dŵr, caiff cynefinoedd newydd a chyfoethog eu creu o fewn, ac ar hyd glannau afonydd.

Yn amser Hywel Dda, gwerthfawrogwyd yr afanc am ei gig, ei gôt flewog a'i chwarennau. Mae'n amser i ni heddiw werthfawrogi'r creadur fel catalydd a gwnaiff ein helpu i greu cynefinoedd iachach a gwell amrywiaeth o fywyd gwyllt. Yng ngwyneb newid hinsawdd ac effaith hwnnw ar ein cynefinoedd gwlypdirol, mae'n bryd i ni groesawu'r afanc yn ôl, 400 mlynedd wedi i ni achosi ei ddifodiant.

Dysgu mwy am deithiau'r **Huganod**

I ble mae huganod Gwales yn teithio er mwyn canfod bwyd? Ychydig o wybodaeth sydd wedi bod ar gael am hyn yn y gorffennol. Yn sicr, nid pysgod yn unig y maen nhw'n eu dal ar y siwrneiau hyn – dônt a sbwriel plastig yn ôl i'r ynys i'w gynnwys yn eu nythod, ac mae hwn yn beryg i'r adar eu hunain. Mae ***ELINOR GWYNN*** *yn disgrifio gwaith ymchwil diweddar, a gwaith arfaethedig, i edrych ar y ddwy agwedd hon o fywyd yr huganod ar Gwales.*

Ynys Gwales, haf 2006
Grassholm, Summer 2006

Mae ynys Gwales, sy'n gorwedd 14km oddi ar arfordir Sir Benfro, yn cynnal nythfa anferthol o huganod. Gweddol ddiweddar yw hanes y nythfa hon. Tybiwyd iddi sefydlu o gwmpas 1820 ar ôl i rywfaint o huganod gyrraedd o Ynys Wair (Lundy), a hynny wedi iddynt gael eu herlid yn y fan honno. Ers hynny mae nythfa Gwales wedi tyfu yn gyson, ond ar gyfraddau gwahanol dros y blynyddoedd. Ugain yn unig o nythod a gofnodwyd yma yn 1883, ond bellach mae'r adar yn gorchud-dio'r ynys gyfan bron yn ystod y tymor magu. Erbyn hyn, amcangyfrifir bod rhyw 33,000 o barau yn nythu yma rhwng Mawrth a Hydref.

Mae ymweliad â Gwales yn un o ryfeddodau bwyd gwyllt Cymru. Mae disgrifiad y bardd William Dunbar (15fed G) o'r nythfa huganod ar Bass Rock, wrth fynedfa Firth of Forth. yn disgrifio Gwales i'r dim:

The air was dirkit with the foulis
That cam with yawmeris and yowlis
Whith shrykking, screeking, skyming, scowlis
And miklie noyis and showtes

Cyw wedi'i ladd ar y nyth gan blastig
Chick killed on the nest by plastic

Lluniau: ©S. Votier

Dros y gaeaf bydd yr adar yn hedfan tua'r de, i dreulio'r gaeaf oddi ar arfordir gorllewinol yr Affrig ond daw'r rhai cyntaf yn ôl i Wales mor fuan â mis Ionawr, os bydd y tywydd yn ffafriol.

O ganlyniad i waith modrwyo, rydym yn gwybod cryn dipyn am deithiau mudol yr huganod hyn. Ond ychydig o wybodaeth sydd wedi bod ar gael, hyd yma, ynglŷn â'r math o deithio sy'n digwydd i ganfod bwyd yn ystod y tymor nythu.

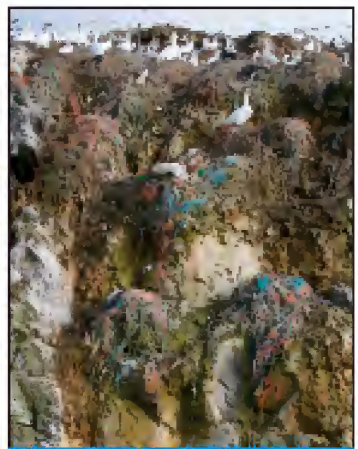
Bellach, oherwydd gwaith criw o ymchwilwyr o brifysgol Plymouth, rydym yn dechrau deall mwy am arferion bwydo huganod Gwales. Aeth yr ymchwilwyr ati, yn ystod haf 2006, i osod teclynnau GPS ar rai o'r oedolion; dewiswyd yr adar o blith y parau ar gyrion y nythfa er mwyn lleihau aflonyddiad. Daliwyd yr adar ar yr union adeg yr oedden nhw'n trosglwyddo dyletswyddau ar y nyth, er mwyn sicrhau na fyddai unrhyw wyau yn cael eu gadael heb eu gwarchod.

Llwyddwyd i gael gwybodaeth am deithiau 24 aderyn. Wnaeth yr un ohonyn nhw fentro ymhellach i'r gogledd na rhyw derfyn anweledig rhwng Pen Strwmbwl a Waterford yng Ngweriniaeth Iwerddon. Nid yw'n glir ai presenoldeb ffrynt a oedd yn gyfrifol am hyn. Teithio tua'r de neu tua'r gorllewin oedd y patrwm; Bae Abertawe oedd y siwrne bellaf tua'r de-ddwyrain, roedd nifer o'r adar yn cyrraedd gogledd Cernyw ac roedd y gweddill o'r siwrneiau wedyn tua'r de orllewin ac allan i Fôr yr Iwerydd. Y daith bellaf a gofnodwyd oedd un 800km, ond roedd yr adar eraill hefyd yn teithio dros 400km. Mae'r wybodaeth hon gyda'r mwyaf manwl erioed a gasglwyd am siwrneiau bwydo'r hugan ac mae'r gwaith wedi rhoi tystiolaeth bod yr adar yn teithio'n llawer pellach nag y tybiwyd cynt.

Anodd yw sefydlu pa fwyd yn union y mae'r adar yn ei ddal mewn gwahanol leoedd. O ddadansoddi cynnwys stumogau a chwydwyd ar ynys Gwales, gallwn ond gasglu eu bod yn bwyta cymysgedd o bysgod cefnforol (pelagig) y gallant eu dal eu hunain, fel cornbig a mecryll, ynghyd â physgod dyfnforol fel hadog y mae'n rhaid eu bod wedi casglu o longau pysgota.

Mae'r gwaith yn parhau. Bwriedir ceisio cymharu dosbarthiad yr adar pan fyddant allan ar y môr gyda ffactorau abiotaidd fel lleoliad llongau pysgota a ffactorau biotaidd fel presenoldeb larfâu pysgod. Bwriedir cymryd samplau gwaed hefyd er mwyn penderfynu i ba raddau y maen nhw'n bwydo ar bysgod dyfnforol neu rai cefnforol.

Darn arall o waith y mae'r ymchwilwyr yn bwriadu ei wneud yw asesu cyfanswm a natur y llygredd plastig yn nythod yr huganod.



Gwarth y sbwriel ar Ynys Gwales
The litter problem on Grassholm

Mae'r llygredd plastig hwn wedi cynyddu dros y blynyddoedd. Nôl yn 1922, fel hyn y disgrifiodd Vivian Hewitt, y casglwr wyau, nythod yr huganod ar yr ynys *"their nests were*

Tracking the Gannets of Grassholm

Little has been known to date about the foraging journeys of Grassholm's gannets. The work of a research team from Plymouth University has begun to shed light on this aspects of the birds' lives. The results from GPS tracking devices placed on 24 adult birds during the summer of 2006 showed that all travelled to the south and west, with none venturing north into the Irish sea. The study provided evidence that the birds travel far further than previously thought, with the longest single return journey being 800km. The researchers plan to further work on the birds' foraging behaviour, and on analysing the plastic content of the gannets' nests. The latter work could usefully develop the gannet as a bio-indicator of macro-plastic in the marine environment and thereby contribute to implementation of recent policy to reduce marine litter.

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• Votier, S. a Bearhop, S., 2006 (heb ei gyhoeddi). *Project Appraisal: Assessing levels of plastic pollution in the nests of Northern Gannets* Morus bassanus *breeding on Grasholm, Pembrokeshire, Wales.*

composed mainly of seaweed, occasionally a few tufts of grass and bits of stick being added, the whole mass cemented together with bird droppings". Dim gair am blastig. Dim ond gwymon a glaswellt a nodwyd gan R.M Lockley hefyd, wrth ddisgrifio'r nythod yn ei lyfr *I Know an Island* nôl yn 1947.

Erbyn heddiw mae cymysgedd o blastig i'w weld ar hyd a lled y nythfa - a phob nyth, yn ddiwahân bron, yn cynnwys llinynnau 'twein' a rhwydi pysgota oren. Er bod staff RSPB yn ymweld â'r ynys ar ddiwedd bob haf i ryddhau adar sydd wedi cael eu dal yn sownd gan y plastig, mae rhywfaint o'r adar yn marw bob blwyddyn o ganlyniad i lwgu ar y nyth.

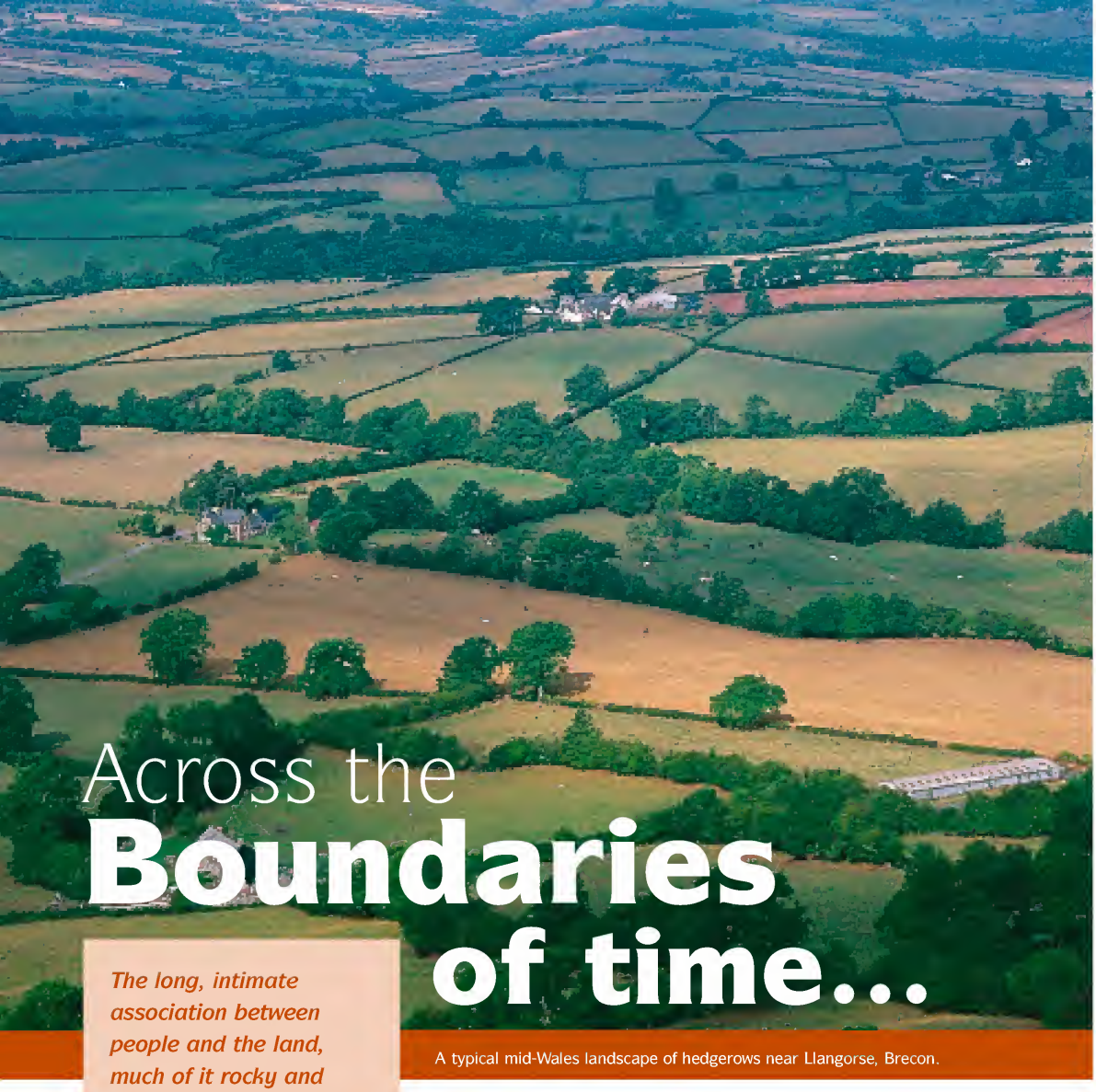
Bwriad yr ymchwilwyr yw cymryd yr haenen uchaf o ddeunydd o 20 nyth, gan adael digon ar ôl i ddenu pâr yn ôl y flwyddyn ganlynol. Dadansoddir y nyth wedyn er mwyn gallu penderfynu pa ganran o blastig sy'n bresennol ym mhob nyth, adnabod y prif fathau o blastig (a fydd yn gymorth i adnabod y ffynonellau a chymryd camau i'w leihau) ac adnabod oedran y plastig. O hyn, bwriedir amcanu beth yw natur a chyfanswm y plastig ar yr ynys gyfan, a bwrw bod yr 20 nyth yn gynrychioliadol. Wrth farcio'r nythod a dychwelyd yn rheolaidd i samplo, gellir mesur hefyd ar ba gyfradd y mae'r plastig yn cynyddu yn flynyddol, a cheisio darogan y perygl i'r adar.

Mae'n bosib y gallai'r gwaith hwn gyfrannu at sefydlu ffordd o fesur lefelau plastig ac at bennu Amcanion Ansawdd Ecolegol ar gyfer y môr yn gyffredinol. Drwy ddefnyddio huganod yn y modd hwn fel 'bio-ddangosydd'ar gyfer macro-blastig, gallai ategu'r gwaith sydd ar y gweill i fesur gronynnau plastig yng nghylla adar drycin y graig ym Môr y Gogledd. Gwaith yw hwn a fydd yn cyfrannu at gyflawni polisi Ewropeaidd diweddar ynglŷn â lleihau sbwriel morol (Cyfarwyddeb UE 200/59/EC). Gan fod plastig morol yn gymaint o broblem erbyn hyn, o safbwynt ei effaith ar fywyd gwyllt ac ar weithgaredd economaidd fel twristiaeth, mae gwir angen mynd i'r afael ag ef. Rhaid sicrhau bod unrhyw waith ymchwil a mesur fel hyn yn cael ei ddefnyddio er mwyn gweithredu er lles ein hamgylchedd.

GPS device fixed to a gannet's back

Un o'r huganod gyda'r teclyn GPS ar ei gefn

Mae ***Elinor Gwynn*** *yn*



Richard Kelly

Across the Boundaries of time...

The long, intimate association between people and the land, much of it rocky and mountainous, can be seen in the diversity and prominence of traditional boundaries in Wales. Here ***RICHARD KELLY*** *gives an introduction to the historical and archaeological aspects of these important features in our landscapes.*

A typical mid-Wales landscape of hedgerows near Llangorse, Brecon.

Being the only historic environment specialist in CCW, I sometimes get the impression that I am expected to know everything there is to know about matters historical and archaeological. Colleagues will often ask me, “What is that curious mound I've got in my field?”, or it might be, “We've found this funny looking, clay-like object, buried in the garden... any ideas what it is?” I try to be helpful; but while I might give the impression that I have an encyclopaedic, or for that matter, telepathic knowledge of the Welsh countryside and what lies beneath it, in most cases, I simply don't know the answer. I have to look it up, or at least offer to find out from someone who might know more than I do. It goes with being an archaeologist I suppose; the Indiana Jones hat and endless adventures colleagues think I must be having!

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An aerial view of the Vile open field system, Gower

The same is true of traditional boundaries; we simply do not know very much at all about them, except that they are widespread, they can be very distinctive landscape features occurring in a variety of materials and styles, and it would be very difficult to imagine many parts of our countryside without them! It was with some trepidation, therefore, that I agreed to compile this brief article for *Natur Cymru*, on traditional boundaries, setting out what little we do know about them from archaeological and historical perspectives.

Boundaries are primarily built to enclose and protect an area of land for crop or stock raising, ensuring that predators are kept out while stock is kept in. They can also provide shelter by calming the wind and lessening its chill factor, which can be critical in windswept or otherwise marginal areas where even a few days of early crop growth can make an appreciable difference. Boundaries can also give protection from flooding and prevent erosion.

Up until fairly recent times hedgerows were valued as a source of raw materials and food, through coppicing, the occasional felling of hedgerow trees for wood or fuel, the trapping of game and the gathering of seasonal wild plants and fruits. They provided the resources to which most people were denied access, in the once much more extensive woodlands and forests that existed. Areas of forests were protected with dykes and ditches as the hunting preserves of the king and gentry, while pales (boundary fences) often surrounded medieval deer parks.

As an archaeologist I am more interested, however, in the function of boundaries as territorial markers showing who owned or controlled the land. This is equally important today, as every farmer knows to keep his 'clawdd terfyn' (boundary wall) in good condition! In medieval times, boundaries delimited administrative areas as well as land held in different types of ownership. For example, many commotal and township boundaries survive in use today, and can be followed, in some cases, for considerable distances across the landscape. Commots have no modern equivalents, but they would have been roughly the same area as half a dozen or so modern parishes. Townships were smaller than parishes and traditionally there were a hundred townships in a commot.

These ancient boundaries can also be traced on aerial photographs where they have well-developed hedge or tree growth. On the ground, they can be recognised by their generally wider and more robust construction, with later or subsidiary boundaries being butted against them, rather than being of one build. In more open areas of higher ground,

boundaries were unnecessary and a series of boundary stones would have performed the same function. There were monastic and ecclesiastical boundaries as well as secular or administrative ones.

The gap in our knowledge here is the very limited extent to which anyone has ever surveyed these types of boundaries in the field, and then matched them to historical documentary information, and ultimately to the institutions responsible for their construction. The reverse is also true, in that historians have seldom ventured into the field to trace boundaries for which they have written references in early records and charters. This is a field ripe for study.

Boundaries also control access, keeping people and animals away from crops and other animals. Some country lanes in Wales are of considerable antiquity and can have their origins in the prehistoric period, when the seasonal movement of people and stock between winter and summer pastures first became established. In later historical times, this system became known as the 'hafod' and 'hendref' system, by which time many of the tracks and lanes crossing rising ground had become over-deepened and sunken with millennia of wear. The narrow country lanes descending off the Clwydian Hills into the Vale of Clwyd below are remarkable examples in this context.

Boundaries were not always built, and the manner in which land was communally organised in many parts of Wales during the medieval period meant that many arable areas were organised into open fields. These were open in the sense that there were no physical barriers to negotiate, but where one holding started and another ended was clearly apparent in the distinctive linear strips into which the open fields were divided. The two best known survivals of this once extensive form of land organisation can be seen at the Vile open field system on the Gower, and in the area around the village of Llannon, in Ceredigion.

There are many more, but less well-known survivals in Wales, especially where the original open strips have been bounded off into fields at a later stage, as occurred, for example, at Uwchmynydd on the Llyn Peninsula.

Going further back in time, the earliest reference one could claim to be an administrative boundary is the name 'Wales', which is derived from the Latin word wallia - a wall. This meant that the area known as Wales, and its early Welsh inhabitants were, quite literally, 'outside the walls' of what would have been the Roman city of London. Of greater linguistic significance around this time is the fact that many of the Welsh words for traditional boundaries, like *wal* (wall), *clawdd* (earth bank), *gwrych* (hedge) and *gweirglodd* (enclosed meadow), have recognisably similar equivalents in Cornish, which split as a separate language from Welsh in the 7th to 8th centuries. The implication is that many of the land-use patterns and terminology that survive today could well have had their origins in the pre-Roman, Celtic period.

Richard Kelly

Medieval open strip fields 'fossilised' by later boundaries at Uwchmynydd on the Llŷn Peninsula

Richard Kelly

Aerial view of a prehistoric settlement and fields overlain by later boundaries, near Llanaelhaearn, Gwynedd

The archaeological evidence bears this out, and the division of land by boundaries was certainly a feature of the Bronze Age landscape on Dartmoor, where a system of reeves has been found extending over vast tracts of the moor. There is nothing equivalent to the Dartmoor reeves in Wales, but all the archaeological evidence points to the Welsh landscape having been intensively used during this time. By the ensuing Iron Age, which spanned the second half of the first millennium B.C., hundreds of miles of boundaries were in place, which have survived to this day. Their fabric might well have been replaced several times since they were originally built, but it is evident in their plans and layouts that they were originally physically connected to, and contemporary with, sites of proven Iron Age date.

This type of evidence is most abundant in areas where surface stone is plentiful and, because of the marginal nature of the land, it has been uneconomical to clear the remains of earlier settlements and fields in later times. The slopes around the margins of Snowdonia have an almost unbroken cordon of late prehistoric, stone built settlements and field systems, most now lying relict and abandoned, but with a sizeable proportion of the field systems preserved in the lines of recent and modern fields. In the southwest, the Preseli Hills, Strumble Head and the St David's Peninsula have comparable remains.

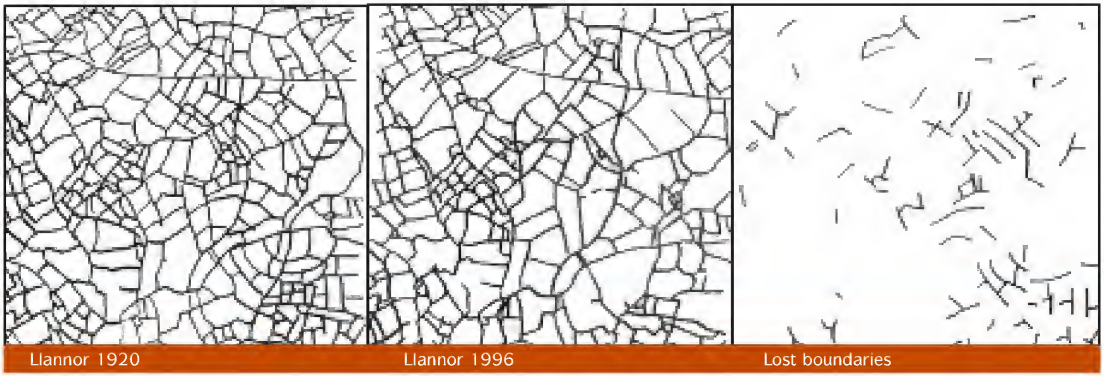
Sometimes settlements and fields were reorganised along different lines, creating what some have called a 'palimpsest' of overlying remains. The earlier remains are still visible, especially from the air, and create spectacular patterns in the landscape as can be seen near Llanaelhaearn in Gwynedd.

Where stone was not plentiful, earth, clay and wood would have been used. These materials tend not to survive, being prone to decay and erosion, and therefore they are absent or less easy to recognise in the archaeological record. In coastal areas and on flood plains, drainage ditches would have served as boundaries and there is evidence that the distinctive 'reen' systems of the Gwent Levels have their origins in the Roman period. The military occupants of the Roman legionary base at Caerleon are believed to have been responsible for initiating the reclamation of the Levels on a major scale. The Welsh Laws, which were first written down in the 12th century, mention 'bangor' as an enclosure of wattles, and six centuries earlier, 'Bangor Fawr in Arfon', now modern Bangor, was an early Christian ecclesiastical foundation within a wattled enclosure.

Henry VIII dissolved the great monasteries and ecclesiastical foundations, as every schoolchild knows. The sale of their lands contributed to the development of the capitalist economy which, as far as the history of traditional boundaries is concerned, led to the rise of the great landed estates. These institutions, which by the late 19th century owned or leased up to 80% of the land in Wales, were responsible for reorganising the Welsh landscape on a hitherto unprecedented scale. Wastes and commons everywhere were enclosed and the landscape and its stock of boundaries took on the appearance they have essentially retained to this day. The most potent symbol of this period of enclosure is arguably the straight-sided ffridd walls of the mid 19th century. They were often built across seemingly impossible slopes, which was the result of their layouts being planned in estate offices that were far removed from the ground on which the walls were built. Ardudwy, Gwynedd, is particularly notable for its ffridd wall landscapes.

After the First World War, the influence of the great estates lessened and farming became increasingly

Figure 1



mechanised, with the result that the overall stock and condition of traditional boundaries has declined. Figure 1 shows the loss of cloddiau (stone-faced earth banks) in the parish of Llannor on the Llŷn Peninsula, between 1920 and 1996, a pattern which is probably typical of most arable areas of Wales over the same period. However, all is not lost: agri-environment schemes like Tir Gofal can offer financial assistance to farmers to restore and make stock-proof, traditional boundaries on their land.

This article has of necessity focussed on some of the more interesting historical and archaeological aspects of traditional boundaries. It has not looked at all at the wide range of types, materials and construction styles that exist, nor their distribution, which would easily form the basis for a whole series of articles!

As champions of the Welsh landscape and in recognising the historical and wildlife importance of traditional boundaries, CCW is hoping to collect information about the distribution of different traditional boundary types and styles in Wales, via an interactive www questionnaire in the near future. The information will be used to target resources and aid management of our traditional boundaries in agri-environment schemes and so on. We would like your help, so do look in "across the boundaries of time" at **www.ccw.gov.uk**! Thank you.

Richard S Kelly *is Historic Landscapes Officer for the Countryside Council for Wales.*

Bwrw golwg dros ffiniau amser

Pwy allai wadu pwysigrwydd terfynau yng Nghymru? Yn wir, daw'r enw 'Wales' (a 'Gwalia') o'r gair Lladin 'walia'- dyma'r tir a fodolai y tu hwnt i furiau dinas Rufeinig Llundain, ganrifoedd yn ôl. Sefydlwyd llawer o'r terfynau, a'r eirfa gysylltiedig, nôl yn y cyfnod Celtaidd cyn-Rufeinig. Codwyd milltiroedd o derfynau yn ystod yr oes Efydd a'r oes Haearn ac fe'u gwelir hyd heddiw - yn enwedig ar diroedd ymylol, creigiog. Crëwyd patrymau gwahanol yn ddiweddarach, er enghraifft wrth i dir comin a ffridd gael eu hamgáu gyda thwf ystadau mawrion y 18fed a'r 19eg G. Annoddach darganfod tystiolaeth mewn ardaloedd llai creigiog, gan mai o bridd, pren a dŵr y crewyd terfynau. Weithiau, mewn systemau cydweithredol o ddal tir, fel yn achos y 'Vile' ar Benrhyn Gwyr, dim ond llinell o newid rhwng dau fath o gnwd fyddai'n dangos terfyn daliad.

Mae bylchau yn ein gwybodaeth ynglŷn â therfynau Cymru.Yn ogystal â gwarchod da byw, rhoi cysgod rhag y gwynt, atal erydiad a chyflenwi bwyd (yn achos gwrychoedd) maen nhw hefyd yn adlewyrchu patrymau perchnogaeth a ffiniau gweinyddol. Maen nhw hefyd yn rheoli mynediad, fel yn achos y lonydd cul dwfn a gysylltai hafotai Bryniau Clwyd a'r hendrefi yn y dyffryn islaw.

Mae cynlluniau amaeth amgylcheddol bellach yn helpu adfer terfynau traddodiadol sydd wedi dirywio ers y Rhyfel Byd cyntaf. Mae Cyngor Cefn Gwlad Cymru yn awyddus i gasglu gwybodaeth am ddosbarthiad gwahanol fathau o derfynau. Cadwch lygad ar agor am holiadur rhyngweithiol ar wefan CCGC **www.ccw.gov.uk**

The **ring ouzel** in Wales

There are few sounds more evocative of the uplands in early spring than the call of the ring ouzel. It is sad, therefore, that the fortunes of such an appealing bird have been in decline in recent years. There is still much to learn before conservation measures to reverse this decline become even a possibility, as ***MICK GREEN*** *reports.*

Tony Cross

Ringing helps to track the birds

The ring ouzel (*Turdus torquatus*) is one of the classic birds of the Welsh uplands. Its melancholy piping song is evocative of the more craggy areas of our uplands and, being one of the earliest of migrants, it is the bringer of spring to the hills. Unfortunately it is also in serious decline, the reasons for which are unclear.

Ouzels arrive back in Wales from their wintering grounds around the Mediterranean and North Africa in March. Nesting territories are often in areas of mixed habitat containing crags and gullies with scattered bushes and trees commonly at heights of 250-350 metres or more. Foraging for invertebrates takes place in areas of short grazed turf where earthworms were found to be an important part of the diet during the spring (Tyler and Green 1994). Later in the summer berries, especially bilberry, become a more important component. Eggs are laid in a grass nest, very similar to a blackbird's, and a clutch size of four is the most common. Two broods are often raised keeping the birds busy into the summer. Southward migration starts in August and continues into October, with most birds arriving in the wintering grounds from late October onwards.

Although ringing recoveries are few, the main wintering grounds appear to be the hills of North Africa, especially the Moroccan Atlas. The ouzels move through the Pyrenees, and often linger in the southern Spanish hills before crossing into North Africa (Burfield 2002). In the Atlas mountains they are found in the considerable areas of juniper forest at heights between 1400 and 2000m (Green, Unpublished), where juniper berries are thought to be an important part of their diet (Ryall and Briggs 2006).

Two races of ring ouzels breed across northern Europe, and their wintering ranges overlap. A third race breeds and winters in Asia Minor. The nominate race *torquatus* has undergone significant declines in its breeding numbers and a contraction

in its range across the UK, while the Fennoscandanavian population appears, from observations of migrating numbers of birds, not to have declined, although published breeding surveys are few.

Tony Cross

Nests are built close to the ground

Welsh breeding ring ouzels have been in decline since at least the 1970s. Tyler and Green (1994), using records from county bird reports and contacts with ornithologists, came up with a suggested population of 450-500 pairs in Wales for the 1980s. A sample survey of the UK in 1999 came up with an estimate for Wales of 293-392 pairs (Wotton et al 2002). A resurvey of a large number of the 1999 tetrads in 2006 showed a 69% decline in occupancy since then (Green, In Press).

Various reasons for the declines have been suggested. These range from declines in habitat quality and food supply in the breeding grounds and wintering grounds, to hunting pressures on the migratory birds and climate change. Extensive moorland 'improvement' and afforestation in Wales adversely affected the quality of their habitat in the 1970s and 1980s. However, although this mainly stopped in the 1990s, and some areas have been reinstated through agri-environment schemes, the declines have continued. Habitat degradation continues in the wintering grounds. Much if not all of the juniper forest is in a degraded and ageing state, with no recruitment of young trees (Ryall and Briggs 2006, Pers. obs). Hunting pressure on the migration routes may also be an issue, and may explain why the mainland Europe population appears to be in less trouble. Of ringing recoveries of ouzels from the UK, 77% were killed by hunters, mainly in France (Burfield 2002) and it has been suggested that the migratory route taken by UK birds may make them more vulnerable to hunting (Burfield and de L Brooke 2005). Finally, in a study of the possible effects of climate change, Beale et al (2006) found links which suggest that changes in summer temperature and rainfall may be having an effect on ring ouzel numbers. In Morocco juniper may be suffering from

Juniper berries

Peter Wakely/Natural England

Ffarwelio â'r fwyalchen fynydd yng Nghymru?

Profiad prin, erbyn hyn, yw clywed chwibaniad melancolaidd mwyalchen y mynydd ar hyd llethrau creigiog Cymru. Mae'r aderyn mudol hwn wedi bod yn prinhau yn ddychrynllyd ers y 1970au, ond mae'r rhesymau am hyn yn aneglur. Gallai nifer o ffactorau fod yn gyfrifol; dirywiad yn ansawdd y tiroedd magu a hefyd y cynefin gaeafu yng ngogledd yr Affrig, pwysau hela a newid hinsawdd. Mae'r fforestydd merywen pwysig ym Moroco mewn cyflwr difrifol oherwydd rheolaeth wael a newidiadau hinsawdd. Tybir hefyd fod llwybr mudo mwyeilch mynydd Prydain yn golygu eu bod yn fwy tebygol o gael eu lladd gan helwyr ar gyfandir Ewrop. Hyd nes y byddwn yn deall yn well y rhesymau am y dirywiad sylweddol, mae dyfodol yr aderyn hwn yng Nghymru yn edrych yn weddol anobeithiol.

increased temperatures and changes in rainfall, along with the long term degradation from grazing.

It is unclear which of these possible reasons are causing the declines, and it is quite likely to be a combination of all of them. We need further studies of the ouzel, particularly post fledging and in the wintering grounds, to help to begin to understand these causes. Unless we can address at least some of the reasons for the decline, the future of the ring ouzel in Wales looks rather bleak at present.

***Mick Green** is a Director of Ecology Matters.*

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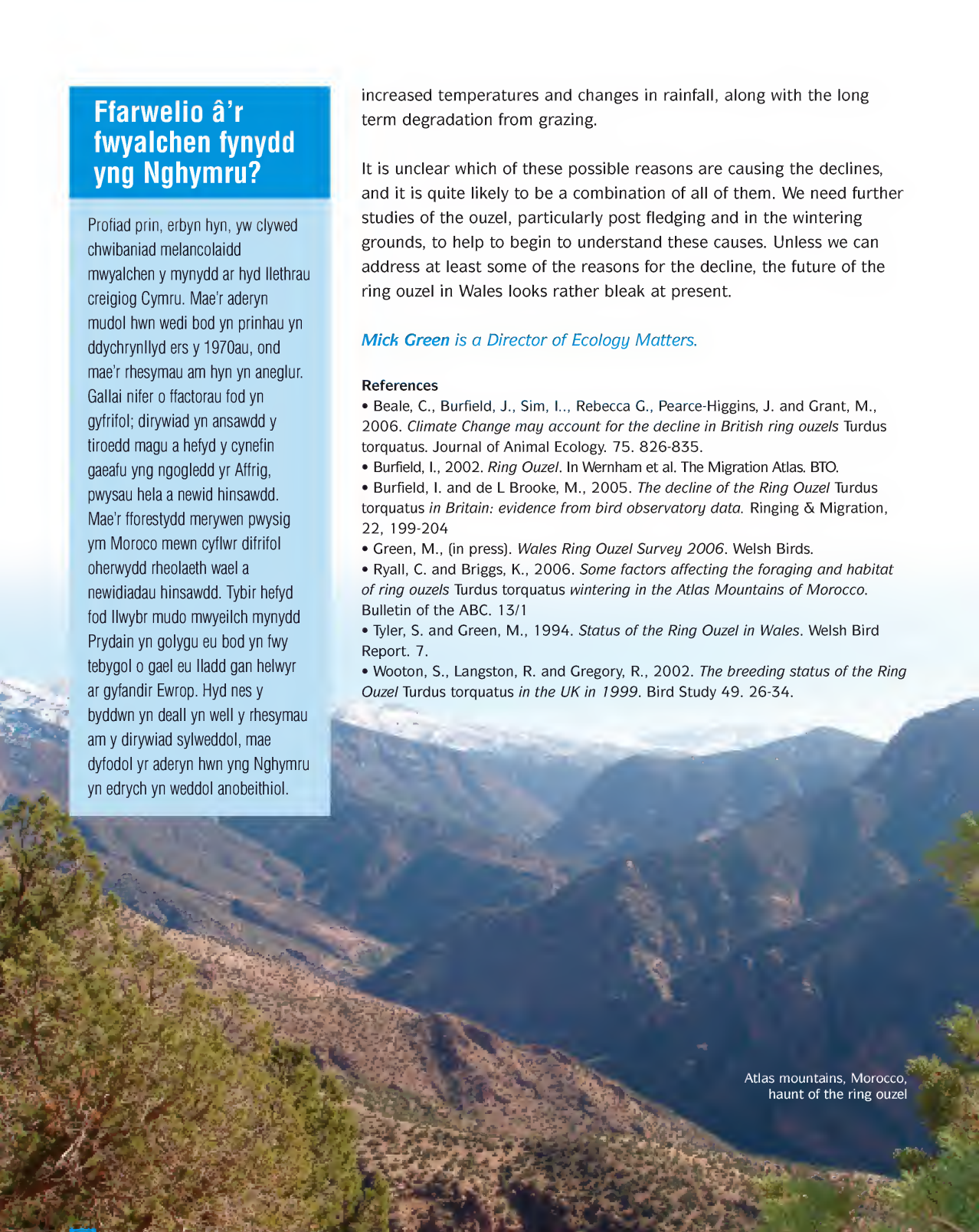
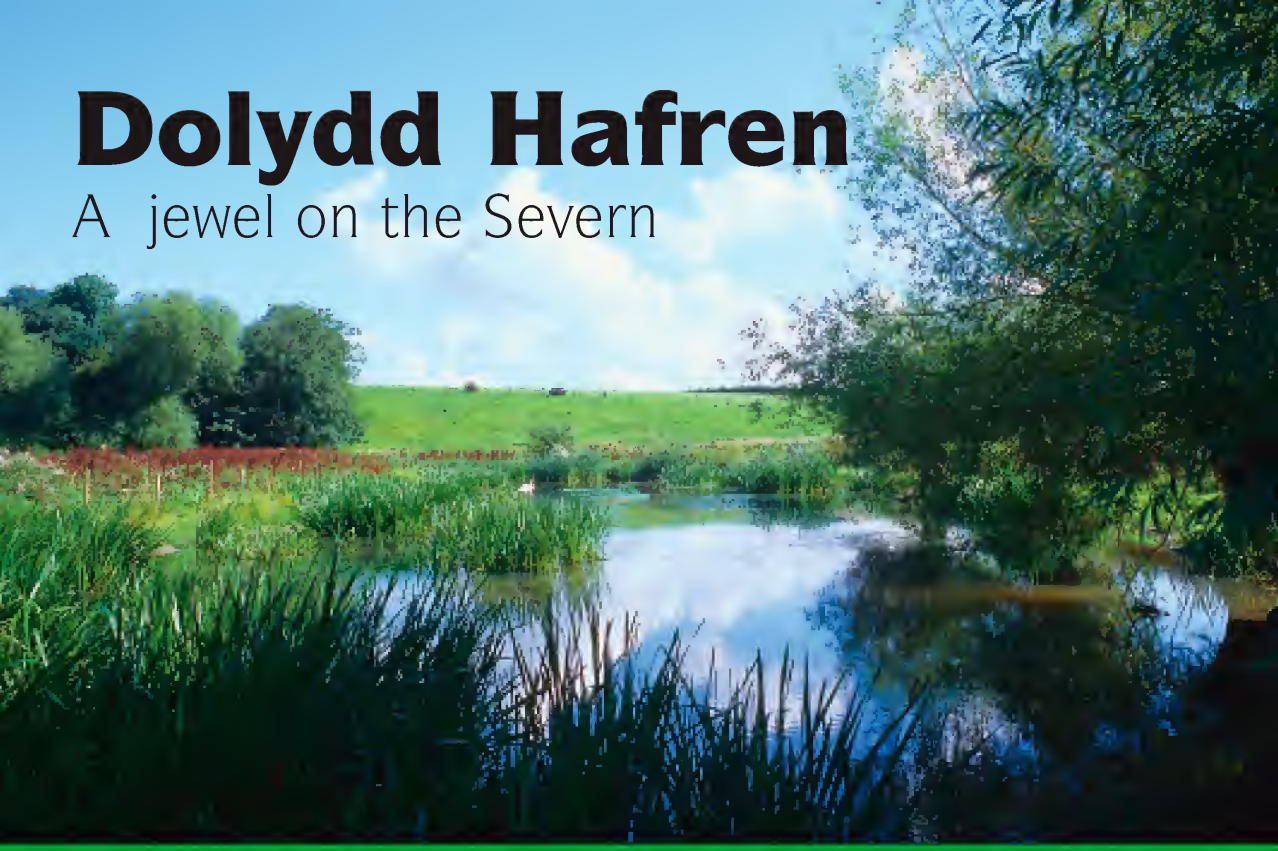


Atlas mountains, Morocco, haunt of the ring ouzel

Dolydd Hafren

A jewel on the Severn



All pictures: Brayton Holt

Backwater on the Severn

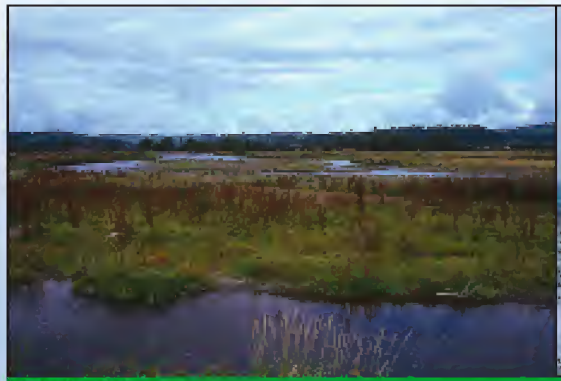
A stretch of river provides the necessary conditions to attract an astonishing array of birds throughout the seasons. It also attracts an array of birdwatchers. ***BRAYTON HOLT*** *reveals the secrets of a riverside reserve, a beautiful place with abundant birdlife, which does not need rarities to make it special.*

Goosanders

Every Tuesday morning for at least fourteen years, a group of now ageing birdwatchers has gathered at Dolydd Hafren, the Montgomeryshire Wildlife Trust reserve on the River Severn, near Welshpool, to find and count the birds. We sit in the comfortable hides with our 'scopes trained forward, our flasks and chocolate biscuits at the ready, to cope with whatever the season brings.

Here the Severn valley is wide and flat, and this 105 acre parcel of land which for many years was known as 'The Gaer', the name of the farm on which it stands, was well regarded as a bird-rich area. In 1992 it was acquired by the Trust and renamed Dolydd Hafren, the 'Meadows on the Severn'. The Severn bisects the land and two smaller rivers flow into it, the Reiw at the western end and the Camlad to the east. Over the years, the dynamic Severn has changed its course time and again through the area of the reserve, leaving ox-bow loops and small pools which have become quiet backwaters, some of which were enlarged and planted with common reed, burr-reed and flowering rush, a partnership between Nature and Man that resulted in a rich mosaic of habitats.

The braided river with its banks of varying height is bordered by meadows where skylarks sing and brown hares chase, and where gorse bushes



The river in Autumn

The river in Winter

attract stonechats and nesting linnets. The reserve boundary of hedgerows and a variety of trees provides food, nesting sites and cover throughout the year. Overlooking the reserve are two elevated hides, one adjacent to the largest pool, the other perched high above the river on the 'big bend' giving splendid views up and down river, and to shallow scrapes backed by a bullrush lagoon, much loved by water rails, teals and green sandpipers.

This wonderful array of habitats provides nesting sites for a diversity of birds, food for passage and wintering species, and quiet ponds where little grebes and kingfishers fish and several species of dragonfly breed. The shrubs, wild flowers and grasses invite lots of butterflies through the warmer months.

The changing seasons

The image of Dolydd Hafren changes season by season. The winter floods re-sculpture the banks and gravel islands and when the waters recede it is always interesting to see what the power of the river has produced. The higher banks where the sand martins have their burrows may have been sliced clean ready for the returning birds, the islands scoured of vegetation. At

this time the winter thrushes, fieldfares and redwings, green sandpipers and most of the wildfowl fly off to their northern homelands, soon to be replaced by oystercatchers, little ringed plovers and common sandpipers. The wintering curlew flock soon disperses, maybe a pair remaining to nest. The herons may already have young in the heronry in the nearby Hall grounds. Waders on passage such as dunlins, black-tailed godwits, little stints, redshanks and lapwings (which used to breed here) probe the mud alongside the few remaining winter snipes. Mallards may have ducklings on the pools as early as March, when the handsome male goosanders are courting their ladies on the river.

As May arrives the *phragmites*, planted not so many years ago, will resound to the croaking song of the reed warblers, and the less harsh notes of sedge warblers issue from the hedgerows and rushes. Swallows and house martins join the sand martins feeding on the insects emerging from the water's surface. The resident grey and pied wagtails are joined by the summer visiting yellow wagtails, which tone superbly with the flowering gorse.

Sedge warbler

Nearby sunflowers provide food for birds

Panic amongst the ducks and waders signals the arrival of one or both of the resident peregrines, either hunting for breakfast or coming to bathe in the river. The latter is a very cautious affair, as the falcons need to keep a wary eye on the teasing and somewhat foolhardy corvids. For several years ospreys were seen fishing the river and this became so regular that it was decided to erect a nest platform. However, a pair built their own nest less than a mile from the reserve and raised one chick, the first to do so in Walesfor many years. For the last three summers a pair of hobbies has bred near the reserve and they are frequent visitors, hunting the sand martins and dragonflies. Buzzards, kestrels and sparrowhawks are all regulars and the occasional red kite completes an impressive list of raptors. A pair of barn owls readily accepted a nest box and bred for one season and although one bird was killed, another took its place and can be seen hunting at dusk.

Counting success

In order to find and monitor nests before the hides were in place, we used to walk transects across the meadows, but now prolonged observation from the hides avoids disturbance and enables us to establish an accurate account of the breeding season. In the last two seasons the number of breeding species has increased by single pairs of shelduck, shovelers, teal and water rail, a reflection, perhaps, of the settled state of the reserve.

Of course we see the predatory side of this vibrant ecosystem, buzzards taking young coots and moorhens, alien mink raiding the sand martin colony, corvids plundering whatever nests they can find and even a large pike snatching a half grown mallard. Otters are seen two or three times a year, their footprints much more often: on one occasion a family of three played together in front of the hide. There is a badger sett and a fox earth on the reserve, just about as far as possible apart.

As summer moves on, goosander mothers can be seen shepherding creches of youngsters, the males having already left to moult in the far north before returning in November. Mute swans and Canada geese nesting on the quieter pools soon introduce

their offspring to the river. Given a fair summer, breeding is largely successful but we have seen years when the shingle nesters and sand martins have been washed out by untimely floods, only to succeed at second or even third attempts when the waters recede.

The season of migration

The circle turns to autumn and the sand martins, plovers and sandpipers are well on their way to Africa. In their place, the reserve is invaded by Canada geese, sometimes more than 700. This introduced species could become a problem to farmers sharing the grazing with their sheep, but they do attract other, more welcome geese - pink feet, white fronted and greylags - in small numbers.

A field that had lain fallow for several years was five years ago planted with sunflowers and cereals, left as a sacrifice crop to provide autumn and winter food for whatever might find it. Immediately this was a great success, drawing in more than 125 tree sparrows, 60 yellowhammers and reed buntings and many finches. This exercise has been repeated ever since, and this winter there was a count of 90 yellowhammers. The winter reeds have become the roost for thousands of starlings which in turn have been picked off by sparrowhawks and barn owls.

We have witnessed some strange events over the years. When the cattle are brought on in summer they make a bee-line for the flowering giant hogweed which they devour with apparent relish. The acquisitive behaviour of the resident pair of ravens has amused us, as they collect stranded golf balls, lost from the upriver course, and make off with them: perhaps there is a clutch in their nest?

There are some records of rarer birds, great grey shrike, a great white egret, black terns and temmincks' stint. There is a rare plant, the unprepossessing mudwort! But this reserve is not about the unusual, just life on a short stretch of Britain's longest river – the evocative cry of the curlew, the peep of the oystercatchers, the beauty of the river, whatever its mood. The reserve is not easy to find: a leaflet is available at the Trust office. Come and see for yourself, but perhaps not on a Tuesday morning!

Reed warbler

A lifelong ornithologist, ***Brayton Holt*** *monitors the birdlife of Dolydd Hafren reserve on a weekly basis, come rain or shine.*

Gwylio'r rhod ar hyd darn o afon...

Nepell o'r Trallwng, yn y fan lle mae afonydd Rhiw a Chamlad yn ymuno â'r Hafren, mae bywyd gwyllt yn cael modd i fyw. Mae grym yr afon, a'r stormydd gaeaf, yn naddu'r tir yn barhaus. Ceir yma ddolenni ac ystumiau afon, pyllau tawel, ynysoedd gro, torlannau pridd serth a sianelau plethog. Ers sefydlu gwarchodfa yma yn 1992, mae'r Gymdeithas Bywyd Gwyllt wedi ychwanegu at yr amrywiaeth o gynefinoedd drwy greu crafiadau a phlannu planhigion gwlypdir. Mae hefyd wedi plannu grawn a blodau haul ac wedi llwyddo denu llu o freision melyn, golfanod y mynydd, breision cyrs a phincod yn ystod y gaeaf. O boptu'r afon mae'r dolydd yn gynefin i ysgyfarnogod, llinosiaid, clochdar y cerrig ac ehedyddion. Bellach mae yma ddewis da o safleoedd nythu a digonedd o fwyd i adar sy' n pasio drwodd neu'n gaeafu yma ac mae nifer y rhywogaethau ar gynnydd.

Mae'r warchodfa'n newid yn fawr o dymor i dymor, o ran ei golwg ac o ran y bywyd gwyllt. Yn yr haf mae'r lle'n fwrlwm o deloriaid, gwenoliaid, siglennod, pibyddion, gwesynnod a gloÿnnod byw. Yn y gaeaf, daw'r gylfinirod, y gwyddau, y breision a'r pincod i gael lloches a bwyd a bydd y gwelyau cyrs cysgodol yn denu miloedd o ddrudwennod. Mae'r ysglyfaethwyr yn rhan annatod o ecoleg y safle - y bwncathod a'r mincod, y tylluanod gwyn a hebogiaid yr ehedydd a hyd yn oed gweilch y pysgod a lwyddodd fagu'r cyw cyntaf yng Nghymru rhyw filltir i ffwrdd o'r safle.

Bardsey Island, its birds and Observatory

The Observatory at Cristin

Sandwich tern

Bardsey has developed a reputation as a place of retreat, a site of near pilgrimage for the naturalist. Yet with so many places competing for our time, most of us only know this island of 20,000 saints by reputation. ***STEVE STANSFIELD*** *provides a detailed portrait of the attractions of the island through the seasons, notably its birds, for the would-be visitor.*

Bardsey Island (Ynys Enlli) is a small, rugged island off the south-western tip of the Llŷn peninsula in north Wales. Readily accessible by boat in good weather, it is a valuable and historic place in the history of Welsh ornithology. Its geographic position in the Irish Sea, sheltering habitats, and the influence of the 130 year old lighthouse, all serve to attract a wide variety of migrant birds to the island every year. Ornithologists have recognised the importance of the island, both as a staging post for migrants and for scarce resident birds, since the early 1900s. Bardsey bird observatory was set up in 1953, and is the only one in Wales at present. It is open to weekly visitors from March to November, and exciting birding can be found at any time of the season, but is very weather dependent.

From the mainland, Bardsey appears little more than a large rocky lump. In reality, four-fifths of its 180 hectares is cultivated and low-lying,

All pictures: ©Wildlifeimages.eu

containing unsuspected richness hidden from mainland eyes by 548 foot high Mynydd Enlli (Bardsey Mountain). It is the only sizeable offshore island in north Wales (Anglesey doesn't count!) and is also the most beautiful and diverse.

Rising abruptly from the sea on the east side to a whaleback ridge, the mountain slopes gently westwards through furze and bracken brakes to extensive flatlands. A patchwork of 130 lush green fields comprises most of the latter, grazed by sheep. To the south a narrow isthmus constricts the island. The short turf and gorse clumps of the smaller southern end are dominated by the gleaming red and white lighthouse tower. From it, the single track runs north, over the Narrows, past the little harbour and the 18th century boathouse, fringing the mountain slopes to terminate at the 13th century Abbey ruins, the heart of a remarkable complex of old buildings (and three listed ancient monuments).

Strikingly varied topography, geology and rich human history contribute to a diversity of habitat unusual for an island of this size. The old drainage system through the fields is partially blocked and there are extensive areas of sedge, yellow flag and marsh marigold contrasting with the heavily grazed grassland of the coast and mountain, shimmering in the early summer with carpets of thrift and squill. There are three withy (osier) beds along the course of the stream, and one by the holy wells near the Abbey; these supplied withies for lobster pots. Other trees and shrubs surround the garden at Cristin (the Observatory farmhouse). There is also a small plantation of spruce, under-planted with native hardwoods, with a smaller extension planted to the north over the past few months.

In stark contrast are the eastern sea cliffs. Here are scenes of intense activity in summer as auks, kittiwakes and shags commute to and from their small breeding colonies and gulls fill the air with noisy clamour. Grey seals give onlookers excellent camera shots as they bask on the rocks at low tide. Over 200 are present in mid-summer, and around 15 pups are born in autumn. Wood mice, common shrews, palmate newts and slow worms are also found on the island.

The Observatory's visitors

Bardsey Bird and Field Observatory has, over more than 50 years, enabled thousands of people to stay on the island. It aims to foster visitors' interests in all aspects of natural history (not just birds!), and to ensure that its visitors, whether experts or beginners, have an enjoyable stay. Recent years have seen marine biologists, entomologists, geologists and mammalogists making weekly visits. The Whale and Dolphin Conservation Society has stayed and conducted regular surveys since 2001, with many sightings of Risso's dolphins and harbour porpoises.

The full time Island Warden and Assistant Warden

The lighthouse is hidden from mainland view by Bardsey mountain

Red-breasted flycatcher

help visitors to the island. The Observatory library contains identification guides in most branches of natural history. Talks and slide shows are held in the School House every week during the season for the benefit of all visitors to the island and other talks are given at Cristin from time to time. Visitors are welcome to bring their own slides to show.

The season opens in late March with the first chiffchaffs, goldcrests and wheatears passing north, harbingers of the busy spring migration period ahead. Visitors assist the daily census of birds and the full-scale ringing programme starts. Up to 8,000 birds of 100 species have been ringed in a year, caught mostly in mist nets or Heligoland traps.

Instruction is given to those who wish to see ringing in progress, whilst for the trainee or experienced ringer, a visit to an Observatory is a valuable opportunity to increase their knowledge. As spring progresses, sedge warblers, willow warblers, whitethroats and spotted flycatchers become abundant passage migrants. The chance of a rarity being found is high in May and early June: subalpine warbler, black-headed bunting, red-throated pipit and red-breasted flycatcher being some recent examples.

A census of the breeding birds becomes a priority in late May, June and early July. Over 30 species of bird nest regularly, including raven, little owl, oystercatcher and 11 species of sea-bird, amongst which are razorbill, guillemot and fulmar and 16,000 pairs of Manx shearwaters. A few pairs of puffins are now breeding. On dark nights until mid-September the shearwaters' weird, cackling calls are heard as they come ashore and visitors can accompany nocturnal ringing expeditions led by the Observatory staff.

By late July autumn migration has started, with August to October the busiest period. Common species appear in large numbers, together with some unusual species, including melodious warbler and icterine warbler.

August's abundant warbler migrants are followed in September by chats, crests and flycatchers. September is a good month for observing sea-birds on migration and among impressive numbers of

Low-lying fields around the lighthouse

commoner species, great skua, sabine's gull, sooty shearwater and Leach's petrel are seen regularly. There are sea-watching hides at the island's southern tip and at its northwest corner.

It is October that has the most to offer anyone wishing to see the full strength of autumn migration. It is a vibrant month with continual passage of restless migrants. Spectacular overnight arrivals of redwings and blackbirds are matched on occasion by massive diurnal movements of chaffinches, skylarks and starlings; with over 25,000 counted flying over in a single morning.

Mist netting and ringing take place whenever possible and it is probably true to say that this is the best month for uncommon vagrants, whether from North America, Europe or Asia. Rose-coloured starling, Blyth's pipit, ortolan bunting, Radde's, Pallas's and lanceolated warbler are recent October records, whilst firecrest, red-breasted flycatcher and yellow-browed warbler are seen almost every year. Common yellowthroat in 1996 was a fifth record for Britain and the island list now stands at just over 300 species.

A haven for migrants

Bardsey is well known as one of the few sites where night migration can actually be watched taking place. Under cloudy (and often wet!) conditions following the new moon, migrating birds are attracted to the revolving beams of the lighthouse, sometimes in tens of thousands, and the night is noisy with the flight calls of diverse species. Since 1978 the observatory, in co-operation with Trinity House and the RSPB, has had a unique 'false lighthouse' - powerful quartz-iodide lamps on a tripod - placed outside the main lighthouse compound. The lamps draw some bird species safely away from the lighthouse to the gorse bushes, so that as many as 10,000 migrants have roosted there on one night alone. Visitors may watch these 'attractions' and help the Observatory staff to deal with grounded birds.

Inevitably this is a brief description of Bardsey and its Observatory; it is intended as a guide to prospective visitors to help them decide at which time they would prefer to visit. The only adequate way to enjoy island life is to sample it; so do pay us a visit soon. Once you have made one trip to this lovely and interesting island you are likely to wish to return, as so many do, time and time again.

Guillemots

Razorbill

Ynys y Pererinion Pluog

Sefydlwyd Gwylfa Adar Enlli yn 1953 ac mae'n rhoi cyfle arbennig i bobl aros ar ynys ac i ddatblygu diddordeb mewn bywyd gwyllt. Gallant hefyd helpu gyda'r gwaith o gyfrif a modrwyo rhai o adar nodweddiadol Enlli, fel yr aderyn drycin Manaw, yn ogystal â rhai o'r ymwelwyr mwy prin sy'n glanio am gyfnod tra'n mudo.

Mae'r tymor mudo yn cychwyn ar ddiwedd Mawrth gydag ymddangosiad adar cynta'r gwanwyn, fel tinwen y garn a'r siff-saff . Mae'n cyrraedd ei anterth rhwng Awst a Hydref ac ar ddiwedd y tymor bydd heidiau anferth o adar fel coch dan adain a mwyeilch yn glanio, yn ogystal â rhywogaethau prin fel bras y gerddi a'r ddrudwen wridog. Gyda'i goleudy yn denu adar fel magned yn ystod y nos, mae Enlli yn enwog fel un o'r ychydig leoedd lle gellir gweld y mudo'n digwydd.

Gall Enlli gynnig rhyfeddodau eraill i ymwelwyr. Ond rhaid mynd yno i gael y wefr o weld cannoedd o forloi llwyd yn gorffwyso'n braf, y caeau bach llaith yn frith o gelaets a gold y gors, y clogwyni'n binc dan flodau clustog Fair a'r llethrau môr serth yn fwrlwm o garfilod a gwylanod coesddu. Ond amhosib yw anghofio dylanwad dyn ar y lle - mae yno i'w weld yn glir ym mhatrwm y caeau, y tai, y capel, yr abaty a'r fynwent, yr odyn galch a'r ysgoldy.

Bardsey is of course a National Nature Reserve with a unique and often fragile flora and fauna, constantly under study. There are certain restrictions of access to some areas, especially the east side of the mountain. There is a ban on any introductions of plants and animals by visitors as they could damage the existing wildlife. This applies especially to cats, dogs, rats, mice, wild flower and bird seed. If any visitor wishes to collect specimens of any description, permission must be obtained in the first instance from the Bardsey Island Trust and CCW.

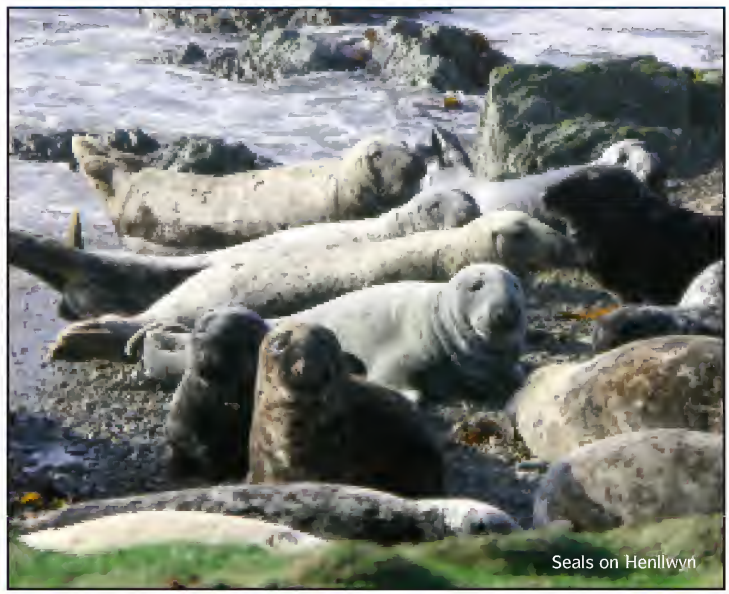
Staying at the Observatory

When visitors arrive on Bardsey they are usually met by the Warden to transport the luggage the half a mile or so to Cristin, the large double-fronted 19th century farmhouse located in the centre of the island. Downstairs there is a common room, dining room, pantry, washroom (with hot and cold running water) and a well equipped kitchen with calor gas cookers and a fridge. There are six bedrooms (2 single, 2 double and 2 treble). A new central heating system has recently been installed so staying at the beginning or end of the season is now very comfortable and warm!

General Booking Information

Contact Alicia Normand on 01626 773908 to book or visit the web site (bbfo.org.uk). In addition to the Observatory accommodation, there are eight houses available for weekly rent; see the Trust website (enlli.org) or ring 08458 112233.

***Steven Stansfield** is Warden at the Bardsey Bird and Field Observatory*


Seals on Henllwyn

Ecological Connectivity - developing natural connections

Natural connections along the River Wye

Nature conservation has always been about drawing lines on maps and trying to protect nature within set boundaries, so-called 'special sites'. But this has its limitations, not least because nature is dynamic, and species often need to move around. Here ***JIM LATHAM*** *describes how, with climate change likely to greatly increase the problem of small and often fragmented wildlife sites, CCW is examining what needs to be done at a landscape scale to ensure that wildlife has somewhere to go.*

One of the biggest problems facing our natural environment is that of fragmentation. Over thousands of years habitats have become progressively broken into smaller and more isolated parcels. This can cause local extinctions, disrupt natural processes and make it ever more difficult for species to move around the landscape, whether dispersing, migrating or foraging. The problem will become much worse if the effects of climate change are as strong as predictions suggest: species will need to move across the landscape to stay within their climatic ranges, or risk extinction.

To address this problem, we need some quite radical new approaches to nature conservation. We need to think big – at a landscape scale – to focus action such as habitat expansion, restoration and improvement so that it is best placed to reverse the effects of fragmentation, and to prepare for the impacts of climate change. In short, we need to improve the ecological connectivity of the landscape.

The Countryside Council for Wales (CCW) is exploring ways of doing this. It's not easy, as ecological connectivity means different things for different habitats and species. For some habitats, woodlands for example, it's possible to envisage large-scale habitat networks that could span much of the country; for others, such as fens that are restricted by soils and

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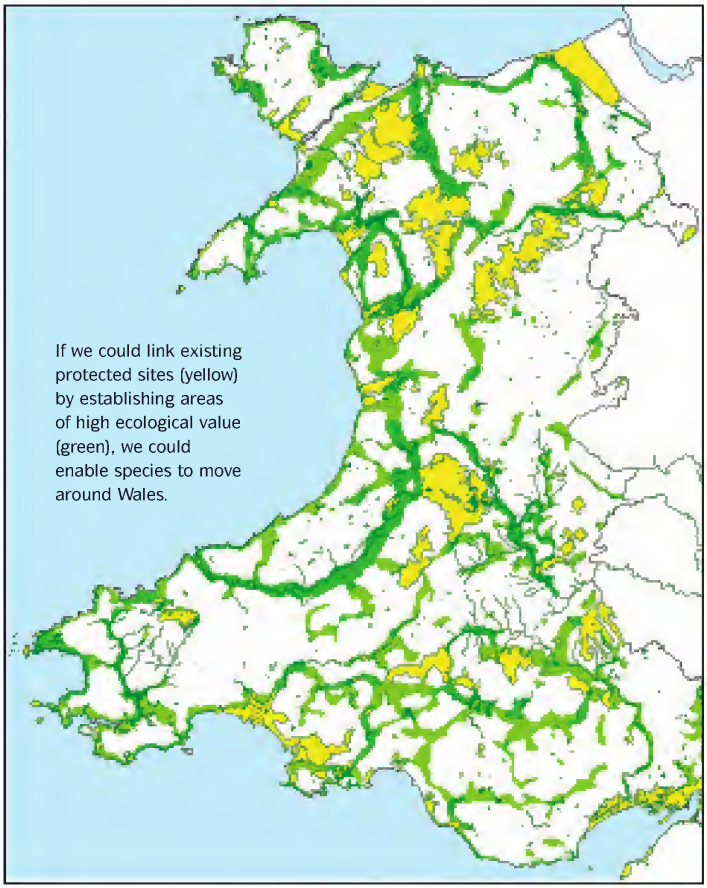

If we could link existing protected sites (yellow) by establishing areas of high ecological value (green), we could enable species to move around Wales.

landform, the emphasis needs to be on consolidating individual sites and local networks. The same is true for species: those that are relatively mobile may respond well to new habitat linkages, whilst individual site expansion may be best for species that disperse slowly.

The most important nature sites (primarily the SSSIs and SACs), should be central to any plans. Our proposal is to make sites more robust by improving their local conditions and by developing green connections between them, so that species can more easily respond to climate change by moving between sites. This would turn these protected areas into a more functional series, rather than a collection of independent sites. It would also provide a way of integrating the roles of the wider countryside and special sites. The priority should generally be to 'work out' from the protected sites, consolidating and protecting these before attempting to make more extensive connections.

We need to produce maps of ecological connectivity, identifying both areas that are currently well connected, and those where increased connectivity would be desirable. We have good datasets now to do this, particularly the Habitat Survey of Wales (Phase I) (Howe, et al., 2005). This shows that some major features, notably the coastal zone, the ffridd zone (upland fringe), the major upland blocks and some river corridors, already have a high proportion and diversity of semi-natural habitat. Because of their shape these are naturally good connections between protected sites. We also have computer models of habitat networks for woodland, grassland and heathland (Latham, 2006) which can be used to identify key locations for connections between SSSIs for these habitats. There are also more local networks, for example clusters of sites for fens, great crested newts or marsh fritillaries, which could be integrated into an overall national framework.

These features can be combined in computer mapping analyses, and any strong correspondences identified as important natural connections. This work is ongoing, but the emerging picture is one of well-defined natural connections following the coast and embracing the uplands, united by connections that stretch inland along river corridors: together, these would bring the majority of our protected sites into a national green framework.

But what would these natural connections look like? There is no suggestion of drastic change, and generally what would be required would be a gentle increase in semi-natural habitat cover and an improvement in condition within these areas; in many areas the connections may already be in place

Radicaliaeth er mwyn achubiaeth

Hollti, crebachu, diflannu. Dyna fu hanes ein cynefinoedd dros y canrifoedd. Ond mae syniadaeth radical ar waith i geisio taclo'r broblem anferthol hon, yn enwedig gan fod newid hinsawdd yn mynd i orfodi rhywogaethau i symud er mwyn goroesi. Gweithio ar raddfa fawr i ymestyn, adfer, gwella cyflwr a chysylltu cynefinoedd yw'r nod, gan ddefnyddio'r safleoedd dynodedig fel gleiniau yn y gadwyn.

Mae gwaith y Cyngor Cefn Gwlad eisoes yn dechrau dangos bod cysylltiadau da o fewn a rhwng rhai o brif nodweddion ein tirlun - fel yr arfordir, y ffriddoedd, yr ucheldiroedd a'r dyffrynnoedd. Ceir yma gyfran helaeth gynefinoedd lled naturiol ac mae'r tirffurfiau yn hybu cysylltiadau da rhwng y safleoedd dynodedig. Mae gennym rwydweithiau mwy lleol hefyd - fel clystyrau o gorstiroedd neu safleoedd brith y gors.

Nid newidiadau syfrdanol, ond cynnydd cymedrol ym maint a chyflwr cynefinoedd lled naturiol, sydd angen cyflawni er mwyn cryfhau cysylltedd ecolegol yn yr ardaloedd hyn. Creu digon o gyfleoedd er mwyn i amrywiaeth dda o rywogaethau symud yn ôl lledred ac uchder.

Ond wrth ddatblygu'r gwaith hwn, rhaid ystyried agweddau llai dymunol hefyd, fel lledaeniad rhywogaethau ymledol, a chofio nad yw bywyd gwyllt yn parchu ffiniau gwleidyddol a chenedlaethol!

©Getmapping PLC 2007

Little thought was given to animal movements when the M4 bisected Hensol Wood

and simply require recognition and maintenance. They would be broad enough to encompass many different habitats, such as a river system, valley bottom and sides, woodland and grassland networks, bracken slopes, ffridd and up to the hill tops. This would provide opportunities for a wide spectrum of wildlife to make use of them. The altitudinal variation is also important, as the response to climate change for many species may be to go uphill as well as northwards. As a national framework, the aspiration is to provide sufficient connectivity for a high proportion of biodiversity to move in response to climate change.

Although the results of this work should be beneficial, there do also need to be a few words of caution. Increased connectivity may encourage invasive species to spread, and there could be losses of genetic diversity for some species if previously isolated populations are brought into contact. These issues will need to be carefully considered as the project proceeds.

The maps are in preparation and will be completed within a few months (so watch this space!). From there we need to consider their practical application, and especially how we can target action to achieve the aims. This work will be relevant to many countryside issues, such as landscape conservation and recreation, and potentially will involve a huge range of individuals and organisations. As wildlife does not recognise boundaries, it would be valuable to make links with work in England, and also extend the concept to the marine environment. These are truly grand plans, but we are living in changing times and for much of our natural heritage it may be now or never.

***Jim Latham** is Woodland Ecologist with the Countryside Council for Wales.*

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• Latham, J. (2006). *Forest habitat networks for Wales*. Quarterly Journal of Forestry, 100 (4): 280-284.

Michael Hammer (CC)

A journey in **Biodiversity**

Kingfishers are a rarity in Scotland

Getting to know the wildlife of your patch is a source of great attachment and interest; but discovering nature in a new one brings unexpected excitements and insights, which may pass the resident naturalist by. Having uprooted himself from Angus and moved to Cardiff, ***DAVID MITCHELL*** *is fascinated by the differences in the birdlife and other wildlife he encounters in Wales.*

A fundamental principle of biogeography is that the distribution of species, habitats and wildlife communities is determined primarily by two factors – geology and climate (you don't find rain forests in deserts and chalk-loving plants don't flourish in acid soils). As a result, the further you travel the more different the wildlife you find around you tends to be.

I was aware of this in theory but I was amazed by the differences I noticed when I moved from Angus in east-central Scotland to Cardiff just before Christmas 2005. A distance of just 350 miles across a small island on the western fringes of Eurasia meant far bigger changes than I had expected.

I arrived at midwinter and so wasn't surprised by the relative warmth and longer days, but the better winter light was unexpected. For whatever reason, bird plumage seemed clearer and sharper, with colours more distinct.

I spent most of the two weeks around Christmas and New Year bird-watching and was immediately struck by how many species, easily seen in Wales, had been very rare or absent in Scotland. I still remember the excitement of seeing my first Scottish nuthatch in the late 1980s, when only a few pairs bred north of the border, but in Wales they seemed to be present in almost every patch of woodland. Kingfishers are widespread in Scotland but nothing like as common as in Wales, reflecting perhaps their susceptibility to the hard northern winters.

Little egrets were everywhere! Every pond and muddy ditch, each tidal creek seemed to hold at least one and this in the dead of winter. A handful are recorded on passage in Scotland each year where they are still sufficiently unusual to attract small crowds of people to see them.

Later, in the summer, I came across a good few Dartford warblers on their breeding grounds in the western Vale of Glamorgan; one particularly confiding individual spent several weeks by Cardiff Bay. Other overwintering rarities were two firecrests, where Western Avenue crossed the Taff, and the dark-throated thrush in Swansea, which pulled in several hundred bird-watchers during its stay – much to the bemusement (and amusement!) of local residents.

Some species (and groups of species) were common to both locations. I was delighted to find all seven corvids (following the convention that hooded and carrion crows are a single species) breeding within a few miles of my new home, with raven breeding in Cardiff itself; I would have needed to trek well into the hills to find breeding raven in Angus, where they are much warier than in Wales, so I was very impressed to have a pair "kronking" overhead as I admired the new Senedd building. Chough are pretty much confined to a few islands in the Inner Hebrides so it was nice to have the local pair celebrate my arrival with the first successful breeding record in Glamorgan for many years!

Magpies are rare in Angus (there are probably more peregrine!) – a striking contrast with south Wales. Rook on the other hand are abundant in the Scottish lowlands but very patchy and thin on the ground around Cardiff and perhaps in Wales generally.

The Welsh raptor population seems to me to be less diverse than Scotland's. I once managed to see ten species in a day in Angus; admittedly I needed a fair bit of luck and it was a long day! In contrast I have only managed to get to grips with seven species of raptor in Wales in almost a year. It's interesting that marsh harrier isn't a relatively common breeding

Merthyr Mawr

Laurence Jones

bird – there are many apparently suitable marshy areas along the south coast.

Nightjar

Although kites are now easy to see in Scotland, thanks to a major reintroduction programme with three release points in south-west, central and northern Scotland, it is still a joy to travel through Welsh kite country in spring, with territorial pairs every few hundred yards. Kites in both countries seem reluctant to colonise new ground, usually establishing new territories immediately adjacent to the existing population. Despite this conservatism it seems likely that in both countries the species will expand to fill all suitable habitat in only a decade or two.

Breeding waders have been declining in numbers and diversity in both countries for several decades but the process has gone further in Wales. A couple of years ago in early summer I spent a couple of weeks on holiday in northwest Wales without seeing a single lapwing. There are a few more in the south but they are nowhere common. Oystercatcher breed throughout much of rural Scotland, in arable fields, heather moorland and on shingle banks beside lochs and rivers. They don't appear to have colonised these habitats in Wales to any extent.

A highlight for me this past summer was spending an evening in a beer garden a few miles outside Cardiff (essential research!) listening to half a dozen nightjars 'churring' around us. Warm enough after dark not to need a fleece jacket; no midges; enjoying rare birds in great comfort – three major plus points for Wales!

There are many other differences between the bird communities of the two countries; gamebirds and breeding duck are much less common in Wales, with several species like capercaillie and ptarmigan apparently absent altogether. Woodland birds on the other hand seem much more abundant. Several species present here, like lesser-spotted woodpecker, would attract crowds north of the border.

If the differences between the bird populations of the two countries were striking, the contrasts when it came to other forms of wildlife were truly eye-opening! First impressions are that native mammals are very thin on the ground in Wales, with an apparent alien takeover! In my first three months here I saw rabbits and grey squirrels, an impressively large rat by a burger van in the Brecon Beacons and a mink cruising lazily down the Taff as it flowed under Western Avenue. Roadkill apart, one fox has been my only native mammal sighting to date, apart from several unidentified bats.

Lapwing

PW Watts/Natural England

By way of contrast, on a normal workday in Scotland I would expect to see grey and common seals in the Firth of Tay as I drove along the waterfront (bottlenose

Paul Glendell/Natural England

dolphins never came that far upriver). Roe deer and red squirrel were both common in the small wood where I walked my dog, while stoat and – on one occasion only – pine marten were present in the woods around my office.

Herds of red deer, several hundred strong, roamed over the hills to the north and their impact on woodland regeneration was obvious. Young trees were hardly able to poke their heads above the heather unless protected by Tuley tubes or deer fences. I hadn't appreciated the effect that roe deer were having on the woods in lowland Angus until I arrived in Wales and saw the dense understorey of bushes and shrubs in Welsh woodland. The large haulms of bramble so characteristic of Wales and so attractive to small birds and butterflies just wouldn't have survived in Scotland.

Wales definitely outclasses Scotland when it comes to large insects – butterflies and dragonflies. It's easy to see as many species of butterfly in a day in Wales as I used to see in Scotland in a year. My British life-list nearly trebled in one summer! Dragonflies too are more common here, with many more species and massively more individuals. In Scotland it was unusual to see more than a handful of individuals at one time, while here they occur in large clouds.

These are just a handful of the changes I have noticed in my first few months here; some gains, some losses but so many exciting differences and so much to see in the years ahead.

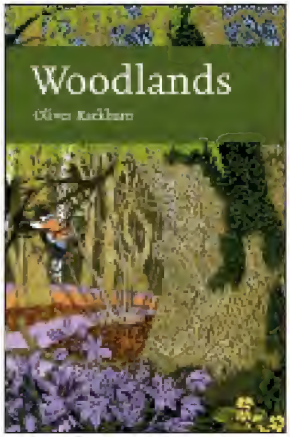
***David Mitchell** is CCW Countryside Officer covering southeast Wales – the coastal strip from Bridgend east to the English border and north to the Brecon Beacons.*

Gweld Newid wrth Fudo tua'r De

Mae symud o Angus i Gaerdydd wedi agor trysorfa i'r naturiaethwr, David Mitchell.
O ansawdd y golau i'r cyfoeth o fywyd gwyllt annisgwyl, mae'r siwrnai 350 milltir tua'r de wedi golygu newydd-deb a newid. Digon o grehyrod bach, glas y dorlan a delorion y coed, telorion Dartford yn nythu a throellwyr mawr i'w clywed o ardd gwrw yn un o dafarndai Caerdydd! Mae saith rhywogaeth o frain yn nythu o fewn milltiroedd i'w gartref, yn cynnwys brain coesgoch sy'n bridio'n llwyddiannus am y tro cyntaf ers blynyddoedd ym Morgannwg.

Er bod yr adar ysglyfaethus yn llai amrywiol, mae wrth ei fodd yn teithio drwy ardaloedd y barcud coch yn y gwanwyn. Ond mae'n tristhau wrth weld tranc cyflymach yr adar rhydiol yng Nghymru. O blith y mamaliaid, y goresgynwyr sydd wedi bod amlycaf ers iddo gyrraedd – y wiwerod llwyd, y cwningod, y llygod Ffrengig a'r minc. Mor wahanol i'r Alban lle gallai weld, o fewn diwrnod, morloi cyffredin a llwyd, wiwerod coch a'r iwrch, y carlwm a bele'r coed (os yn lwcus!). Ond mae Cymru'n cynnig gwell cyfoeth o greaduriaid -di-asgwrn-cefn. Mae ei restr gloÿnnod byw wedi treblu bron o fewn un haf ac mae'r gwesynnod, sydd ond megis smotiau unigol yn hedfan uwchben tir yr Alban, yn gymylau fan hyn.

Green **Bookshelf**



WOODLANDS
Oliver Rackham
Collins New Naturalist series
2006
£45 hardback
£25 paperback

If the idea of wildwood ever captured your imagination, you probably owe it to Oliver Rackham, whose name is halfway to being synonymous with ancient woodlands. His detailed research into woodland history has opened doors to a better understanding of the countryside generally. Rackham's *The History of the Countryside* (1986) adds depth and ecological perspective to earlier, anthropocentric takes on the subject, such as W G Hoskins' *The Making of the English Landscape*.

Woodlands is vintage Rackham, a wealth of familiar and new material expressed cogently and at times humorously. From the beginning he stakes his territory, concerning himself 'with woodland as an ecosystem with a life of its own, in which human agency is one among many environmental factors. In this book trees are themselves wildlife, rather than merely a habitat for wildlife.'

Ecological processes are complex enough without considering the unfolding social history which has interacted with the landscape. Rackham is aware not only of the individual circumstances within which a woodland has changed over time, but also the broader social context – at one point he comments that most woods are survivors of periods of land hunger in the thirteenth and nineteenth centuries.

Within his relatively narrow oeuvre of ancient woodland, he delights in shooting sacred cows (and recommends a similar fate for deer). His penchant for breaking down barriers and re-thinking accepted wisdoms is highly transferable; you don't have to be concerned with woodlands to find an immense amount of food for thought here. His refusal to stay within the walls of academe, or accept any distinction between professional and amateur naturalist, is also engaging. Highly readable, he writes equally for woodland ecologist and interested naturalist.

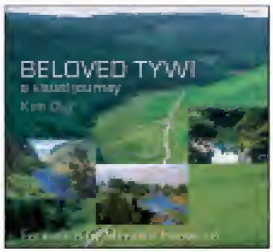
I have two caveats. First, Rackham's research is predominantly into English, indeed often East Anglian, woodlands, and he concentrates on his own research experience. There are lots of references to Ely Cathedral and the Bishops of Ely, but little about Wales and the history which shaped our woodlands. At times I wondered whether the title should have been *English Woodlands*.

Second, I caught myself wondering whether it should have been a *New Naturalist* at all. Given the author's pedigree, and a long gestation, it is perhaps not surprising that Collins chose this volume to mark an important moment in the history of the series, reaching number 100. If you are a Rackham devotee, you will love this book. But it is a slight departure for the series: pure Rackham sandwiched between *New Naturalist* covers.

Fortunately, another woodland *New Naturalist* title is likely to redress the balance soon. George Peterken is almost as closely identified with woodlands as Oliver Rackham, but has spent his time working for their protection as well as writing up his research; and he is very familiar with Welsh woodlands. I have another volume to look forward to reviewing.
James Robertson

A GLEAMING LANDSCAPE – A HUNDRED YEARS OF THE GUARDIAN COUNTRY DIARY
Martin Wainwright (Ed)
Aurum 2006
Hardback £12.99
For a review if this book see page 7.

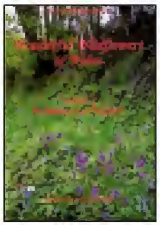
Silff Lyfrau Amgylcheddol

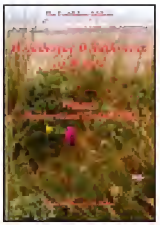


BELOVED TYWI – A VISUAL JOURNEY
Ken Day, Gomer Press 2006
Hardback £19.99
If this book had stuck to its subtitle of a visual journey, it would have been a high quality coffee table book about a subject that is dear to the heart of many of us. The photographs are glorious, mainly of landscapes and mainly taken in summer. Most of the well-loved Tywi scenes are here, the castles, the bridges, the towns and best of all, the river itself. One notable omission is Dolauhirion Bridge, once voted the seventh most beautiful bridge in the world, surely a claim to fame worthy of inclusion in this book.

The text takes the format of 22 'Views from the Valley' of 2-300 words, each by a different author. The problem with this approach is that it leads to writing of uneven quality which is only too apparent here. The strict editorial control required is completely absent.

For naturalists, this is a thin book. There is no photograph of any specific interest and the text fails completely to address this. Two of the writers write about mammals that they admit to never having seen (oh dear) and the piece on RSPB Dinas reads more like a county bird report than a coffee table book. All in all, a missed opportunity.
John Lloyd





THE FIRST NATURE GUIDES TO THE WONDERFUL WILDFLOWERS OF WALES
Vol. 1 Woodland and Waysides
Vol. 2 Seashores and Coastal Cliffs
Vol. 3 Mountains, Moorland and Meadows
Vol. 4 Waterside and Wetland
Pat O'Reilly and Sue Parker
Gomer Press 2005 & 2006 £4.50 each

THE FIRST NATURE GUIDE TO WILD ORCHIDS IN WALES
Sue Parker
Gomer Press
2006 £5.50
These are essentially photographic guides to some of the wildflowers that can be seen when visiting the Welsh countryside. The reader is taken into the woods, fields and waysides and shown the plants that might be found, usually by two photographs: one showing the overall appearance of the plant in its setting and the other showing the flowers in close-up. As someone with many years experience of photographing wild flowers in Wales I was impressed by the high quality of most of the photographs in these slim volumes. The quality of colour reproduction in the printing is also very good.

At first I was puzzled as to the market that these publications are aimed at but I decided that they had been designed to raise awareness of the range of attractive wildflowers to be found in Wales and to introduce the reader to the variety of plants that can be found in particular habitats. The plants did not seem to have been arranged in any particular order – not by colour, not by habitat, not by season. In the text accompanying the pictures the botanical family to which the plants belonged was often mentioned, but not always, and in at least one case was incorrect. There were a number of species which I would have transferred from one volume to another but perhaps that is a result of my north Wales perspective. I particularly liked the anecdotes and comments relating to the medicinal uses of some of the plants.

It was interesting to be told which of the plants were introduced to Wales but the alien status of one truly spectacular introduction – the giant hogweed – was not mentioned. There are a number of small errors, which I hope will be corrected before these attractive books go into a second edition. A friend also commented that it was a pity that the Welsh names for the plants were not included.
Jane Rees

Cymru a'r byd

Pwy fyddai'n dewis bod yn wleidydd yn yr unfed ganrif ar hugain? Ni waeth beth a wnewch chi – beth bynnag fo rhinweddau'r mater dan sylw – fe fydd y cyfryngau eisoes wedi penderfynu eu bod am fwrw amheuaeth dros eich cymhelliad a gwyrdroi eich bwriadau. 'Gwleidydd ydy o; mae o'n siŵr o fod ar berwyl drwg.'

Mae'r agwedd hon yn llifo oddi ar sgriniau cyfrifiaduron newyddiadurwyr ceiniog a dimai ac yn cael eu corddi ar weisg diwydiant sydd wedi gwirioni ar ddenu darllenwyr. Yna, mae hi'n treiddio i ganol ein cymdeithas ac, yn fy marn i, yn niweidio'r gymdeithas honno. Does gan ddemocratiaeth ddim siawns o gwbl os ydym yn cael ein hannog yn ddiddiwedd i amau ei gonestrwydd.

"Pam mae angen trafferthu i bleidleisio?" – dyma yw llef unsain y cyhoedd. Mae'r papurau'n dweud wrthym nad yw Aelodau Seneddol ac Aelodau'r Cynulliad yn gwrando, felly pa wahaniaeth alla' i ei wneud? Waeth imi aros gartref ddim. Ac eto i gyd, mae'r cyfryngau'n beio gwleidyddion am ddiffyg diddordeb y cyhoedd!

Mae'r agwedd hon ar ei chryfaf wrth ystyried yr amgylchedd a'r materion "gwyrdd" sydd erbyn hyn yn rhan mor amlwg o'n bywydau. Ymddengys fod yna ryw ddadl neu'i gilydd ynghylch newid yn yr hinsawdd bob un diwrnod.

Eto i gyd, er ein bod yn orawyddus i'r llywodraeth ddod o hyd i'r holl atebion, rydym yn amharod iawn i ysgwyddo rhywfaint o'r cyfrifoldeb ein hunain. A phan fydd y llywodraeth yn dod o hyd i rai atebion, dydy ein cymdeithas unigolyddol ni ddim yn eu cael yn hawdd iawn eu llyncu bob amser.

Efallai fod gwrthbrawf cryfaf y ddadl nad yw gwleidyddion yn gwrando yn gorwedd yn amharodrwydd y rheini sydd mewn grym i fynd i'r afael â materion amgylcheddol yn y dull cadarn y dymuna'r garfan wasgu 'werdd' ei weld.

Mae gwleidyddion yn gwrando. Maen nhw'n gwrando ar filoedd o bobl sydd wedi gwirioni ar eu ceir, sy'n hedfan i Sbaen yn rhad, ac sy'n codi system wresogi eu swyddfa yn syth ar ôl y Sulgwyn. Os yw pobl yn beio gwleidyddion am fod â gweledigaeth yn y tymor byr, yna rhaid i ni ysgwyddo rhywfaint o'r bai, a hynny gan ein bod yn canolbwyntio gormod ar ein dedwyddwch materyddol ac yn methu â derbyn y camau a fydd yn ffrwyno ein llawnder.

Mae'r rheini yn ein plith sy'n pryderu am ddyfodol ein planed yn gwbl gywir wrth anelu rhywfaint o'u hymgyrchoedd at y cyhoedd. Ond mae'r ymdrechion yma'n gwbl groes i'r cwmnïau amlwladol hynny sy'n gwario biliynau ar farchnata. Efallai'n wir fod plant yn mynd i ysgolion 'ecolegol' – rhywbeth sy'n bluen yn het y system addysg a'r athrawon sy'n ymdrechu'n galed i drwytho'r genhedlaeth nesaf mewn cyfrifoldeb cymdeithasol – ond mewn gwirionedd, a allant ymladd yn erbyn temtasiynau'r farchnad o gofio am yr holl ddulliau gwahanol sydd gan honno i'w hudo a'u denu?

Mewn gwlad ddemocrataidd iach, dim ond ar ôl cael caniatâd y bobl y gall y llywodraeth weithredu. Ni yw'r bobl yma. Fel dinasyddion cyfrifol mewn gwlad hyderus sy'n edrych tua'r dyfodol, mae gennym ddyletswydd i oresgyn sinigiaeth ac anobaith. Gallwn ddechrau trwy droi cefn ar sinigiaid crechwenus y papurau tabloid. Rhowch y gorau i ddarllen y Daily Mail ac ystyriwch y materion dan sylw yn ddwys gan anwybyddu personoliaethau a gwagsiarad. A oes gennym ddiddordeb yn y cwerylon a gaiff Tony Blair a Gordon Brown uwchben eu coffi? Rheitiach o lawer inni gael gwybod beth yn union y gallwn ei wneud i'w cynorthwyo i gael cymdeithas well.

Dylai dinasyddiaeth weithredol gysylltu'n ddeallus gyda'r broses wleidyddol. Dim ond os ydym yn fodlon ymladd dros yr amgylchedd yn yr etholiadau sydd i ddod y bydd gwleidyddion yn gweithredu o'i blaid. Pe baent yn cnocio ar eich drws, a phe baech chi'n dweud "Does dim gwahaniaeth gen i" neu "Dydw i ddim am bleidleisio", mewn gwirionedd allwch chi ddim disgwyl iddyn nhw gymryd yr hyn sydd gennych i'w ddweud o ddifrif.

Felly, yn ystod mis Mai eleni ewch ati i herio ymgeiswyr y Cynulliad, ni waeth be fo'u plaid. Dewch â'r ddadl amgylcheddol ger eu bron a dywedwch "Rydym yn pryderu, rydym yn credu, felly cofiwch weithredu – ac fe fyddwn efo chi bob cam o'r daith!" Efallai y bydd y cyfryngau, hyd yn oed, yn falch o'r hyn a all ddigwydd.

Geraint Hopkins yw Cadeirydd Cyswllt Amgylchedd Cymru

Wales and the world

Who would be a politician in the early 21st century? No matter what you do – irrespective of the merits of the issue – the media will have already decided to question your motives and distort your intentions. "He's a politician; he must be on the make."

This attitude, flowing from the computer screens of the hard-up journalist, and churned out from the presses of a circulation-crazy industry, permeates and, I think, damages our whole society. Democracy, and its proper function, is hopeless if one is permanently disposed to disbelieve or question integrity.

"Why bother voting?" is the resulting chorus from the general public. The papers tell us that MPs and Assembly Members don't listen, so what difference can you and I make? We might as well not even try. And yet the media blame politicians for lack of interest!

Nowhere is this attitude more applicable than to the environment and the prominence of 'green' issues currently in our national life. Not a day goes by, it seems, when we don't hear some news of the debate around climate change.

Yet we are reluctant, as individuals, to pin any responsibility on ourselves, just as we are often over-keen to expect government to come up with all the answers. When they do, they are unpalatable to an individualistic society.

Perhaps the most forceful rebuttal of the argument that politicians don't listen lies in the timidity of those in power to really tackle environmental issues with the seriousness the 'green' lobby demands.

Politicians do listen. They listen to the millions who love their cars, who fly to Spain for a penny, and who whack up the office air conditioning as soon as Whitsuntide has arrived. If short-termism is to be condemned in politicians, then we the people must take some of the blame, for we have become too focused on our own materialistic happiness and convenience to swallow curbs on our over-exuberance.

Those who care about the future of our planet do well to aim part of their campaigning efforts at the general populous. But their efforts stand in stark contrast to those of multinationals with billions to spend on marketing. Children may well attend eco-schools to the credit of the education system and the teachers who strive to instil social responsibility in the new generation, but can they really do battle with the temptations of the market, with the vast means at its disposal to lure and seduce?

In a healthy democracy, government can only happen with the consent of the people. That's us, folks. We have a duty as responsible citizens in a confident and forward-thinking Wales to overcome cynicism and despair. We can start by shunning the guffawing cynics of the tabloid press; put down our Daily Mail and take our issues seriously enough to ignore personality and tittle tattle.

Do we really care if Tony Blair and Gordon Brown have tiffs over coffee? Far better to know what we can do to help people like them deliver a better society.

Active citizenship should be about engaging intelligently with the political process. Politicians will only deliver more for the environment if we are willing to fight for it in the elections that are to come. If they knock on your door and you say, "I don't care," or "I'm not voting," then you can't really expect them to be that interested in what you have to say.

So challenge your Assembly candidates, of all political creeds and colours this May; bring the might of the environmental argument to them and say "We care, we believe, now act, and we shall be with you when you do!" Even the media might be surprised at the result.

Geraint Hopkins is Chairman of Wales Environment Link

Ancient woodland in peril

RORY FRANCIS reports on the threat facing a beautiful ancient woodland, and how the local community has rallied round to try to save it.

Neil Coleman has a battle on his hands. Along with around 20 other Barry residents, he's set up an action group to protect Bluebell Wood, also known as Pencoedtre (at grid reference ST 126 706), a much loved local beauty spot and an irreplaceable part of the Vale of Glamorgan's heritage.

If the developers get their way a total of 10 hectares of this 18 hectare ancient woodland will be developed for housing and industrial units. And what remains will no longer be a complete, functioning habitat, but little more than a buffer zone between different areas of development, with all the noise, light pollution and general intrusion that that implies.

Pencoedtre Wood is typical of much of our ancient woodland in Wales. It is believed to date from at least 1600 and is included in the provisional inventory of ancient woodland published in the early 1990s. Like 25,000 hectares of other ancient woodlands in Wales, it was planted with conifers in the 20th century, threatening its very special ancient woodland characteristics. But, thankfully, the native trees and flowers were never wiped out and have survived well, and the wood today is an ancient wood with some conifers present, rather than a monoculture of conifers.

"I thought that this sort of thing wasn't supposed to happen any more," says Neil Coleman. "We read in the newspapers about how special ancient woodland is and how it's supposed to be protected from developments like this."

But in many ways, Pencoedtre Wood was the one that got away. The land was allocated for development in a local plan some years ago, but it was never actually built on. In 2002, under Environment Minister Sue Essex, the Welsh Assembly adopted a new far-sighted policy which recognised that ancient and semi-natural woodlands are irreplaceable habitats of high biodiversity value which should be protected from development that would result in significant damage. But because Pencoedtre had managed to get into the development pipeline, it became very difficult to get it out again!

Coed Cadw (the Woodland Trust) takes a proactive role in defending ancient woodland that has survived from planning development, and has been aware of the risk to Pencoedtre. We have pointed out that Welsh planning policies have changed, and that the Council cannot just ignore this.

A breakthrough, of sorts, came with the publishing of the Vale of Glamorgan's Unitary Development Plan in 2005. Like its predecessors, the Plan still allocated Pencoedtre Wood for development, but it included the crucial proviso that there had to be an ecological survey of the site before any planning application was approved.

That meant that when an application was submitted the Council commissioned the ecological consultants Ecotech to do a full survey of the site. The work was done, and a very thorough and professional job it was too. It confirmed clearly that the wood is ancient and of very high ecological value, rebutting suggestions to the contrary by the developers.

The habitat survey found no less

©Coed Cadw

Young tree planters

Steve Kind/WTPL

Ancient woodlands are the home of more rare and endangered species than any other UK habitat

than 46 different plant species that are specifically associated with ancient woodland, including greater butterfly orchid, wood sorrel and dog's mercury. In total, 126 different species of vascular plants were found, as well as 71 different kinds of mosses and liverworts and 22 bird species. Indeed, the report is so clear in stressing the ecological value of Pencoedtre Wood that the Countryside Council for Wales is now undertaking an evaluation of the woodland's importance in the national context, a process which may lead to its notification as a Site of Special Scientific Interest. This is an unusual occurrence these days and makes clear just how important a case this is.

Seizing on this opportunity, the Woodland Trust launched a campaign to save the wood, highlighting the issue in the local press and contacting our own members in the area. Largely as a result of this, over 300 individual letters of objection were sent to the local council.

The campaign helped to get things going in the local community.

Realising that the fate of a much-loved beauty spot hung in the balance, local people got together to set up an action group to defend the wood, delivering leaflets door-to-door to let people know what was happening, setting up a stall in Barry, organising a petition to the National Assembly and encouraging more people to object to the planning application.

Local Councillors Chris Franks and Keith Stockwell launched their own campaign to save the woodland, writing letters to the local press in July 2006, pointing out a further irony regarding Pencoedtre. While the Assembly Government is committed to protecting ancient woodland, they said: "The Forestry Commission manages this land on behalf of the Assembly Government. It is the Forestry Commission that is now trying to cut down much of the woodland for housing." Indeed, Cardiff based consultants Harmers Limited have submitted the application on behalf of the Forestry Commission (who lease the land) and the private owners.

A Forestry Commission Wales spokesperson said its support for a development, in line with local authority planning policies, extended back more than 20 years and preceded the Assembly's revised guidelines. However, the organisation always considered the wider context and would adapt its plans if circumstances were to change.

As of January 2007 the wood is still very much under threat. It is quite possible that it might not be designated as SSSI and that the Vale of Glamorgan Council might cave in and allow the wood to be destroyed. You can still help the campaign by writing to object to the planning application. There's more information on this at: **www.coed-cadw.org.uk**

Very many individuals and organisations have thrown their weight behind the campaign to save Pencoedtre Wood. But perhaps the most striking contribution comes from one of the younger local residents. In summer last year, the *Barry News* reported: "Ten year old Joshua Callis, who lives on the Pencoedtre Estate, has taken up the cause", adding that he is looking to get his friends involved in

Joshua Callis

©Coed Cadw

"His mum said: 'Joshua has learning difficulties, but he really cares about the environment and wants to help. He wants to mount a silent demonstration with his friends and I think he'd tie himself to a tree if needs be! I'm very proud of Joshua and I'm proud that he's being so vigilant about something being done on his doorstep.'"

***Rory Francis** is public affairs and publicity officer for Coed Cadw (the Woodland Trust)*

Hysbysfwrdd / Noticeboard

If you would like your wildlife event to feature on these pages please contact Mandy Marsh on 01248 385574 or email m.marsh@ccw.gov.uk (entries may be edited). Please mention Natur Cymru if you attend any of these events.

Brecon Beacons

SPRING WALKING

2-6 Apr Join us on 4 days of led walks. YHA Danywenallt National Park Study Centre. Residential (from £232 full board 4 nights) and Non-residential (£35 p/day inc. lunch).
Contact 01874 676677 or danywenallt@yha.org.uk

International Adult Learners Week

LEARNERS GREEN DAY

22 May We need to hear from you! Would you like to get involved with environmental community projects? Do you have any projects you would like to promote? Last year's campaign brought in over 17,000 new learners. For more information please contact Stephen Johnson on **steve@niacedc.org.uk** or **02920 370900** or see **www.niacedc.org.uk**

RSPB

RAMSEY ISLAND GUIDED WALKS

Pembrokeshire - *15 walks between May and September*, led by an RSPB Warden. Boats depart 9.30 am. Appropriate footware and reasonable level of fitness is required. Further information and booking please contact boat operator Thousand Islands Expeditions, **01437 721721 or 01437 721686**

The Mammal Society

EASTER CONFERERENCE & AGM

13-15 Apr, Royal Agricultural College, Cirencester

TRAINING COURSES

Numerous courses run throughout England & Wales. Perhaps you'd like a course to run near you? For full details please contact **training@mammal.org.uk** or **020 7350 2200.**

13-15 Apr *Mammal Identification*, Rhyd y Creuau, Conwy
16 Jun *Small Mammal Ecology & Survey Techniques*, Preston Montford, Shropshire

University of Wales Aberystwyth

COURSES

Going Green: How to Assess Your Environmental Impact
26-29 Mar Intensive course at Dolgellau Youth Hostel, Gwynedd. £40
Organic Gardening.
16-19 Apr. Intensive course at Borth Youth Hostel, Ceredigion. £40.
Plant Identification.
22- 25 Jun UWA course at the Welsh Wildlife Centre in Pembrokeshire
29 Jun-2 Jul Centre for Alternative Technology, Machynlleth. £40
Details: **learning@aber.ac.uk** or **01970 621580**
www.aber.ac.uk/sell/courses/lllearn/science/

Shared Earth Trust

COURSES

26-29 Mar *Mosses, Liverworts and Lichens – identification* £50
26-27 Apr *Nature Reserves and Habitat Survey* £50
13-15 Jun *Higher Plant Identification* – an introduction £50
20 Jun *Identification of Wildflowers* £50/40
25-27 Jun *Introduction to the Identification of Grasses, Sedges and Rushes* £225/150
28-29 Jun *Phase I Habitat Survey* £150/100
Contact **01570 493358**, **www.shared-earth-trust.org.uk**

Fenn's, Whixall & Bettisfield Mosses NNR

24 Mar- 3 Apr *Bettisfield Church Mosses Exhibition and Fenn's Moss Trails,* 10am – 4pm
28 Mar *The Fabulous Fungi of the Mosses slideshow,* 7.00 pm, North East Wales Institute
29 Apr *Birds of the Mosses Walk,* 1.30 pm
20 May *An Introduction to the Mosses Walk,* 2 pm
10 Jun *Volunteer task to save Bettisfield Moss* 10.30am- 3.30pm.
24 Jun *Dragonflies on Whixall Moss,* 1.00 pm – 4 pm

Full details Caroline Evans **01743 282005,** or Joan Daniels on **07974 784799 (caroline.evans@naturalengland.org.uk,** or **www.naturalengland.org.uk)**
Practical Volunteering Tasks
2nd Sunday and 4th Thursday of every month. Details **01948 880362**

Ryton Organic Gardens

GARDEN ORGANIC

1 Apr *Celebrate Spring* 11am - 5pm Garden tours of beautiful spring flowers. Craft Fair, demonstrations & children's activities. New for 2007: free bag of compost.
30 Jun-1 Jul *Organic Food & Wine Show* 10am-5pm
A feast of organic food and wine to taste and buy, plus cookery demonstrations, talks, garden tours and children's activities.
Garden Organic (HDRA), Ryton Organic Gardens, Wolston Lane, Coventry, CV8 3LG. Helen Morgan-Parra **024 7630 3517**
www.gardenorganic.org.uk

Butterfly Conservation

Pearl-bordered Fritillary field trips

5 & 12 May Middletown Hill, Middletown, mid-Wales 2.00pm
18 May Y Frochas Common, mid-Wales Stout walking boots and suitable clothing essential. No dogs. Simon Spencer **01691 648339**.
Butterfly Identification Courses
19 May Loggerheads Country Park, between Mold & Ruthin. Please book: Kate Burgess **01824 708234**, **kate.burgess@denbighshire.gov.uk**
31 May *Rhydymwyn Nature Reserve, Mold.* Please book: Jacinta Williams, **01352 742 115, weo@newwildlife.org.uk**

South Wales Branch
May to July *Small Pearl-bordered Fritillary Surveys*
Volunteers needed – please contact your local country recorder, or Richard Smith **(01446 793 229).**
www.southwales-butterflies.org.uk
rgsoverton@boltblue.com

Marcher Apple Network

THE BIG APPLE

6-7 May *Blossom time* – seasonal celebration of Apples and Cider in the Herefordshire Parishes of the Marcle Ridge. For more information phone **01531 670544.**

Gwynedd, Conwy and Anglesey

BEST WILDLIFE GARDEN COMPETITION

Is your garden welcoming to wildlife?
You can enter as: private gardens; school gardens; business gardens; community gardens
Enter before 21 May for 2007
Entry form and/or free information pack from Anna Williams, **01248 360981, annawilliams@wildlifetrustswales.org** or enter on-line at **www.gardenforwildlife.co.uk www.garddiobywydgwyllt.co.uk**

Wales Biodiversity Partnership

NATIONAL BIODIVERSITY WEEK

9-17 Jun Check out the WBP website to find out what's happening in your area **www.biodiversitywales.org.uk /www.bioamrywiaethcymru.org.uk** or phone **01248 385 599/743.**
Night Of The Nightjar And Other Creatures
8.30-11pm Come and see if we can find the nightjar as well as other creatures of the night. Adults £2 children under 14 free.
7, 14, 21 & 28 Jun Cors Bodgynydd, nr Betws Y Coed, Gwynedd. Meet in the Cyffty Mine car park, SH 773 588. Details and booking please phone **01248 385599/385743** or Neil Griffiths on **07764 897413.**
9, 16 & 23 Jun Gwaith Powdwr, Penrhyndaedraeth, Gwynedd. Meet in the car park, SH 621 389. Details and booking please phone **01248 385599/385743** or Rhydian Morris on **07764 897414.**

Anglesey Walking Festival
Full details of these events, including booking arrangements, will be available in the Walking Festival programme, available from Menter Môn. **http://www.mentermon.com/**
13 Jun 7.30 *Anglesey's wonderful wildlife* presented by Ian Wright - a glimpse of the island's rich biodiversity.
16 Jun *Walk at Cors Goch* NNR,10.30am - 3.30pm Explore the history, landscape and biodiversity of this nationally important wetland site, led by Chris Wynne. An easy circular walk of 4-5 miles; bring packed lunch.

Other walks
13 Jun 6.30-8.30 *Evening walk at Brewery Fields, Bangor*. Come and enjoy this rich wildlife area which is full of surprises. Leader: John Featherstone. Meet at Ysgol Friars SH 564713.
17 Jun 2pm *Walk, Ddôl Uchaf Reserve, Caerwys*. at Map Ref:- SJ 143714. Near Afon-wen, on A541. Regenerated woodland, grassland and ponds. Leaders: Simon Farr or Graham Berry.

Pensychnant Nature Conservation Centre

MOTH PROGRAMME 2007

Contact Julian Thompson at Pensychnant, Conwy, north Wales for further details: **01492 592595** julian.pensychnant@btinternet.com
All welcome. Children welcome if supervised by a responsible adult. Booking is not essential but is advised in case of plan changes and because places will be limited for some events. For outdoor events wear suitable footwear and clothing. For night-time events, bring a torch.
Moth Group Informal Meetings
2 Apr, 7 May, 4 Jun, 8pm at Pensychnant £1.
16 Apr, 21 May, 18 Jun, 8pm at Treborth, Bangor £1.

EVENTS

21 Apr *Databases & Software for Recorders*. Pensychnant, 10-5pm. Bring packed lunch.
28 Apr *Macrophotography* by Ilija Vukomanovic. Pensychnant 2pm.
19 May *Identification of Macromoths* with John Harold & Julian Thompson. Pensychnant 2pm.
2 Jun *Larvae* with John Harold. Bring outdoor clothing and packed lunch. Pensychnant, 10.30-4pm.
13 Jun *Field Recording & Moth Trapping*. 6.30pm till late. Meet at Bryn Pydew reserve, SH817797. Contact Neil Griffiths for full details **01248 351 541.**
15 Jun *Silky Wave Daytime Survey*. North Wales Wildlife Trust Gogarth Reserve (on west side of Great Orme) 2-4pm. Wear trousers and walking boots.
23 Jun *Field Recording & Moth Trapping*. 6.30pm till late, Pensychnant.

National Moth Recording Scheme Training Days
10.30-4pm Led by John Harold. Introduction to moths and methods of moth recording. Live moths, caterpillars, illustrated talk and an outdoor session (weather permitting). Children very welcome if accompanied by a responsible adult. Bring suitable clothing and footwear, and packed lunch.
26 May Moelyci Environmental Centre, Lon Felin Hen, Tregarth, nr Bangor, Gwynedd.
3 Jun Breakwater Country Park, Holyhead, Anglesey.

BTCV Cymru

SPRING INTO ACTION 2007

24 & 25 May Margam Park, Port Talbot.
Opportunities for both individuals and corporate volunteers to take part in a wide range of activities – including creating willow arches, rhododendron clearing, dry stone walling, constructing bird and bat boxes, nature walks and much more. For full details please contact Sarah Arnott, **029 2052 4276, s.arnott@btcv.org.uk www.btcvcymru.org.uk**

IVOR REES reporst on a marine stranding, and progress with the Marine Bill

Eilir Daniels

The run of southerly gales in November and December 2006 stranded millions of *Velella velella*, or 'By the Wind Sailors' on south and west facing shores the length of Wales. When alive, they resemble small blue jellyfish, though related to the hydroids or 'Sea Firs'. Floating on the ocean surface with an oblique 'sail', they drift at an angle to the wind. Left and right-handed forms diverge as they travel from warmer parts of the open Atlantic, and on British coasts left-handed ones usually predominate. This time right-handers were sometimes common amongst those freshly stranding, though the dried skeletons found later were over 95% the north-turning type. A larval stage carried by counter currents deeper in the ocean sustains mid ocean populations. The gales also brought in much plastic debris, made more interesting to naturalists by the attached masses of goose barnacles *Lepas anatifera*. Such indicators of oceanic drift provide salutary reminders of the continuity of the seas far beyond the remit of the devolved administration in Wales!

At the time of writing and with a White Paper not due till spring, it is still not clear what the long awaited Marine Bill might actually contain, let alone whether it will get Parliamentary time. Consultations have suggested several likely strands, the least controversial being unification of marine development consent procedures. Conservationists must hope that technical, scientific and conservation issues will continue to be carefully considered by relevant experts however departmental responsibilities are re-configured or devolved. With offshore dredging of aggregates for the construction industry, existing procedures are generally considered to have worked if too slowly. In other circumstances, political expediency may sometimes have overridden scientific advice. As so often in the past, implementation of statutory instruments and advice notes will ultimately influence conservation even more than the primary legislation. Enabling measures to encourage Integrated Coastal Zone Management were also in the consultations. In Wales, a clear example where a local ICZM review could produce better decision making relates to placing marina facilities where they may do least harm to the flourishing Menai Strait mussel cultivation industry.

Years before the proposed Marine Bill began its gestation, the Statutes under which the Sea Fisheries Committees (SFCs) function needed revision. It is notable however that the inshore fisheries where SFCs have key roles are far healthier than those mainly administered at national or EU level. Herein lies the possibility of Welsh divergence from England. DEFRA and most of the nature conservation bodies see the Marine Bill as an opportunity to give SFCs a clearer role in marine wildlife conservation as well as inshore fisheries management. However, Welsh Assembly Government has already proposed abolishing the two SFCs here. Whether AMs or appointees with specialist knowledge are better placed to achieve the desired balance between fisheries and wildlife conservation remains an open question.

Highly protected marine areas were at the top of the shopping lists of several conservation NGOs for inclusion in a Marine Bill. Justification was partly based on the collateral damage done by trawl and scallop dredging operations and partly on concerns that in mixed fisheries, species quotas and mesh selection are inadequate to protect vulnerable stocks. Beam trawlers targeting sole continue to be a major drain on remaining populations of depleted gadoids and elasmobranchs. The recent review of the Common Fisheries Policy advocated a more ecosystem-based approach to fisheries management. The case for closed refuge areas becomes stronger each year that quota deals significantly exceed the scientific advice. The choice of areas to close that might benefit fish stocks as well as safeguarding the more charismatic or biodiverse wildlife habitats could pose dilemmas for many years to come.

Ivor Rees is a marine biologist .

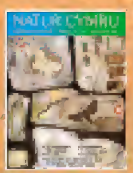
Diolch am y lluniau i / For illustrations, thanks to:
Natural England, Mandy Marsh, Jane Matthews, Alastair Robertson

Laurence Jones

Back issues of *Natur Cymru* (Nos 2 - 21) are available priced £2.50

Number Rhif 14

Number Rhif 15



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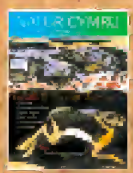

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Eilir Daniels

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